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Subject Guide

1. Information about the subject

| | | | | |
|-----------------------------------|---|-------------------------|---|---|
| SUBJECT | Sociología/Sociology | | CODE | GADEMP01-1-001/GECONO01-004 GCONFI01-1-003/ GRLYRH01-1-008 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Accounting and Finance Degree in Economics Degree in Labour Relations and Human Resources | CENTER | Facultad de Economía y Empresa/School of Economics And Business | |
| TYPE | Formación Básica/Basic | N° TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
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2. Context

SOCIOLOGY is a basic core common subject for all the Bachelor's Degrees offered by the School of Economics and Business. It belongs to the module on *Historical and Social Analysis*.

The subject has an introductory character and provides basic knowledge on the concepts, theories and methodologies which are central to the sociological perspective. The students will acquire an integrative view of the fundamental dynamics and dimensions of contemporary societies, with a particular attention to Spanish society.

3. Requirements

Requirements. As a basic core subject, SOCIOLOGY does not demand specific skills or competencies apart from those relating to access to the Grade.

4. Competencies and learning results

The subject is aimed at the development of the competencies which enhance the capabilities for analysis and synthesis, for critical and self-critical reasoning and learning and for fluent oral and written communication. The knowledge of the sociological perspective will contribute to a better understanding and recognition of the democratic principles of equal treatment and opportunities in the development of contemporary societies.

More specifically, SOCIOLOGY will provide a framework of knowledge and competencies which will facilitate the understanding of the societal environment in which economical behaviour, actors and institutions are embedded.

As a result of the learning process, the student should acquire a set of sociological concepts, theories and methodologies. Also, the student should be able to put into practice this knowledge to understand the fundamental dimensions and dynamics of contemporary societies. Furthermore, the student should learn the basic characteristics which define Sociology as a scientific discipline and its field. Additionally, the student should also be able to understand and interpret the social reality from a sociological perspective.

5. Contents

The course programme of the subject is organized in two parts or sections. Each of these parts is divided into four different units.

Part 1.

Unit 1. The sociological perspective: theoretical and methodological approaches

Unit 2. Macrosocial foundations: society and culture

Unit 3. Microsocial foundations: socialization, interaction and identity

Part 2.

Unit 4. Social inequalities and stratification

Unit 5. Organizations, work and consumption

Unit 6. Politics, governments and social movements

Unit 7. Households and families

6. Methodology and working plan

The methodology of the subject corresponds to the criteria of curricula and teaching practice which are established in the European Higher Education Area. It combines work requiring attendance of the students, including lectures (with a theoretical focus), seminars (with a practical content) as well as other presential activities, namely group tutorials.

The work plan foresees activities either requiring attendance or not requiring it.

On the one hand, presential learning activities will have a total duration of 55 hours, according to the following distribution:

- 1) Lectures, with a theoretical focus (1.5 hours). These sessions will be held on a regular basis of one session per week. In the lectures, the professor will provide the basic theoretical concepts and the terminology of sociological analysis. Also, the students will receive some fundamental notions for the understanding of the macro-processes and structures of society, with the aim of fostering their capacity of critical reflection.
- 2) Seminars, with a practical content (1.5 hours). These sessions will be also held on a regular basis of one session per week. The seminars will take place in reduced groups. They will require the active collective and individual participation of the students in the exercises provided by the professor. These exercises will be aimed at complementing and reinforcing the theoretical contents of each unit. The seminars will also require the utilization of different instruments of text analysis and techniques of qualitative and quantitative analysis of social phenomena which will be the basis for the subsequent interpretative debate.
- 3) Group Tutorials (1 hour). Additionally, complementary sessions of Group Tutorials will be held, which will require the attendance of the students.

On the other hand, non-presential learning activities will have a total duration of 94 hours. This means that the academic activity which does not require students' attendance constitutes 62,6% of the estimated total workload of the subject. Non-presential learning activity includes individual work to be carried out by the student in order to prepare and revise the practical exercises provided in the Seminars, the preparation of working essays, the study and reading for the Evaluation Sessions and the use of the different bibliographic, audiovisual and electronic resources which are connected to the subject. Also, the preparation of the Seminars requires additional time for pre-reading and revising the materials of the practical exercises, namely texts, graphics and other data sets and information.

| <i>Lessons</i> | <i>Total Hours</i> | WORK REQUIRING ATTENDANCE | | | | | | WORK NOT REQUIRING ATTENDANCE | | |
|----------------|--------------------|----------------------------------|--------------------------|-------------------------------------|------------------------|-----------------------------|--------------|--------------------------------------|------------------------|--------------|
| | | <i>Lectures</i> | <i>Practical Classes</i> | <i>Computer Classroom Practices</i> | <i>Group Tutorials</i> | <i>Evaluations Sessions</i> | <i>Total</i> | <i>Team Work</i> | <i>Individual Work</i> | <i>Total</i> |
| Unit 1 | 21 | 4 | 3 | | | | 7 | | 14 | 14 |
| Unit 2 | 21 | 4 | 3 | | 1 | | 8 | | 13 | 13 |
| Unit 3 | 21 | 4 | 3 | | 1 | | 8 | | 13 | 14 |
| Unit 4 | 21 | 4 | 3 | | | | 7 | | 14 | 14 |
| Unit 5 | 21 | 4 | 3 | | 1 | | 8 | | 13 | 13 |
| Unit 6 | 21 | 4 | 3 | | | | 7 | | 14 | 14 |

| | | | | | | | | | | |
|--------------------|------------|-----------|-----------|--|----------|----------|-----------|--|-----------|-----------|
| Unit 7 | 21 | 4 | 3 | | 1 | | 8 | | 13 | 13 |
| EVALUATION | 3 | | | | | 3 | 3 | | | |
| Total Hours | 150 | 28 | 21 | | 4 | 3 | 56 | | 94 | 94 |

| TYPE OF ACTIVITY | | Hours | % | Total |
|------------------|---------------------|-------|------|-------|
| Presential | Lectures | 28 | 18,8 | 56 |
| | Classroom practice | 21 | 14 | |
| | Group tutorials | 4 | 2,6 | |
| | Evaluation sessions | 3 | 2 | |
| Non presential | Individual work | 94 | 62,6 | 94 |
| | Total | 150 | | |

7. Evaluation of the student's learning results

Evaluation of the subject will rely on different instruments. Those students following a continual evaluation procedure will be evaluated as follows:

- 1) Through a final written examination;
- 2) Through participation in practical seminars and homework;

Extraordinary examination sessions will maintain the same principles of evaluation of ordinary examination sessions.

The paragraphs below detail some specific aspects on the procedure of evaluation of the subject, which can be of interest to the students.

1) The final written Examination accounts up to a 60 per cent of the final mark. This examination will evaluate the student's command of the theoretical aspects of the course programme, as well as the individual capacity to apply the practical contents of the subject as presented in Seminar sessions. It will also take into account the students' critical and linguistic abilities, including the appropriate use of the terminology of the subject, the order and consistency in the presentation of the written discourse and the accurateness in syntax and spelling. It is necessary to obtain half of the mark assigned to this exam (30%) as a minimum for the mark obtained through continuous evaluation to be taken into account.

2) Practical sessions and exercises require continued and active participation of students and will represent 40% of the final grades. Students should obtain, as minimum half of that mark (i.e. 20%) to remain in continuous evaluation.

A test on the four first units of the course programme will be valued with 20% of final grades.

The remaining 20% of final grades can be obtained by active participation in sessions and through the delivery of responses to practical exercises proposed by the course professor

3) Students failing to attend more than 20% of the sessions will lose their right to continuous evaluation.

The evaluation of part-time students will be carried out through a final theoretical and practical exam.

Summary Table

| Assessment | Activities | Weight in final grade (%) |
|------------|--|---------------------------|
| Continuous | <ul style="list-style-type: none"> • Test (first four units) • Active participation, practical exercises and Group Tutorials | 20% |
| | | 20% |
| Final Exam | | 60% |

8. Resources, bibliography and complementary documentation

The students of the subject will have to use and consult on a regular basis a number of basic references in order to complement the theoretical and practical materials

provided during the course. The orientation and contents of these references are coherent with the course programme of the subject, as shown in section 4 of the Guide.

The basic references for the course programme are:

Macionis, J. and Plummer, K. (2008), *Sociology*, Harlow: Prentice-Hall (4th edition).

Giddens, A. (2009), *Sociology*, Cambridge: Polity Press (10th edition).

Additionally, the professor can propose additional complementary references to be consulted in relation to a particular unit of the course programme.

Berger, P.L. (1963), *Invitation to Sociology: a Humanistic Perspective*, New York: Anchor Books.

González , J. y Requena, M. (2005), *Tres décadas de cambio social en España*, Madrid: Alianza.

Finally, the subject requires basic knowledge of the most common computer instruments of quantitative and qualitative analysis and graphic representation, for the realization of classroom practices and course essays. Basic skills of written and oral presentation and of working with Word, PowerPoint, Excel (or similar software programmes) are expected.

Subject Guide

1. Information about the subject

| | | | | |
|-----------------------------|---|-------------------------|---|--|
| SUBJECT | Historia Económica Mundial/World Economy History | | CODE | GADEMP01-1-002/GECONO01-1-005 GECONFI01-1-004 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Accounting and Finance Degree in Economics | CENTER | Facultad de Economía y Empresa /School of Economics and Business | |
| TYPE | Formación Básica/Basic | N° TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
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2. Context

World Economic History is a 6 ECTS basic core subject that constitutes part of the Historical and Social Analysis module. This subject consists of analysing the evolution of economic life, mainly those of Western societies and their institutions, in terms of growth and development processes. This analysis is made in order to differentiate the ways in which the social preferences for each economic system become defined as well as to understand current economic phenomena through the economic evolution of the past. Special reference will be made to the Modern and Contemporary periods.

3. Requirements

Role of the subject in the Degree and Prerequisites

Role of the subject in the Degree:

- Economic History can help to gain a better understanding of the origins of economic science and also to shed light on its evolution and the development of economic activity. The relationship with other Economics Degree subjects (micro and macro) is obviously very close and these are necessary to understand economic evolution.

Prerequisites:

- A minimum knowledge of history, mathematics and statistics and a prior course in Economics would be recommendable, though not necessary.

4. Competencies and learning results**Competencies and Learning Outcomes**

General competencies also called transversal competencies.

The instrumental, interpersonal and systemic competencies required by the standard training of the subject are described in the Tuning Project general competencies list. The outstanding competencies among those mentioned are the following:

General Competencies:

- CG1 • Capability for analysis and synthesis.
- CG2 • Learning capability.
- CG3 • Capability for fluent oral and written communication in English.
- CG4 • Knowledge and understanding of other languages, mainly Spanish. Second language is also appreciated.
- CG5 • Skill at searching for and analysing information in the working environment.
- CG8 • Capability for teamwork

- CG10 • Critical and self-critical capability
- CG17 • Negotiation capability
- CG20 • Values and ethics
- CG21 • Integration of democratic values and of the culture of peace in the working environment
- CG22 • Integration of the principles of equal treatment and opportunities for men and women in the working environment
- CG23 • Integration of the principles of equal opportunities and universal access for the disabled in the working environment

Specific Competencies

- CE1 • Knowledge of the legal and social background to economic activity
- CE2 • Inclusion of the historical perspective in the analysis of economic thinking and phenomena
- CE6 • Understand the institutional environment and its impact on economic activity
- CE11 • Understand and assess the way economic agents inter-relate
- CE17 • Transmit information, ideas, problems and solutions from economics to either a specialist

Learning outcomes

We intend to understand how, in the long run, the different forms of social preferences were combined within each economic system. Economic phenomena of the present might be understandable through a knowledge of the economic evolution of the past, as past economic performance influences current phenomena.

Having studied the subject World Economic History, students should be able to attain, at least, the following learning outcomes:

RA5.1: To know and to identify how the different forms of the social preferences had become more definite within each economic system.

RA5.2: To understand and to distinguish the economic phenomena of the present through the knowledge of the economic evolution of the past.

RA5.3: To know connecting and/ or justifying the creation of the economic institutions related with economic policies developed.

RA5.6: To know and to analyse the structure and the functioning of the political systems and the political institutions and their potential influence on the entrepreneurial and economic activity.

5. Contents

Contents

The subject contents are divided into four themes. World Economic History traces the evolution of economic life and the institutional path followed, with special reference to the History of the Modern and Contemporary periods.

1. Introduction to economic development through a long term analysis
2. Economics and economic activity in preindustrial Europe
3. Industrialization in the eighteenth and nineteenth centuries
4. Economic evolution of the twentieth century to the present
5. Particular emphasis will be placed on those phenomena with major territorial and temporal repercussion.
6. The subject is focused on those phenomena which had a greater impact on present-day Occidental countries.
7. The very "Pro-European" slant of this subject is a realistic choice for two main reasons: it is an introductory subject and its duration is that of a normal course: 22.5 theoretical hours and another

22.5 hours maximum of practices.

| | Thematic Issues | Lessons |
|------------|--|--|
| I | Introduction to economic development through a long term analysis | <ol style="list-style-type: none"> 1. From the first economic revolution to the decadence of the ancient world |
| II | Economics and economic activity in pre-industrial Europe | <ol style="list-style-type: none"> 1. The economic evolution of feudal society 2. The expanding economy of Europe during the 15th and 16th centuries 3. The economic evolution of the Modern Age. The growth of the Classical Political Economy |
| III | Industrialization in the eighteenth and nineteenth centuries | <ol style="list-style-type: none"> 1. Industrial Revolution and industrialisation 2. Industrialisation in the northern and central European countries 3. Industrialisation of the southern European countries 4. The economic growth of the United States 5. Economic evolution of the occidental countries from 1874 to 1914 |
| IV | Economic evolution of the twentieth century to the present | <ol style="list-style-type: none"> 1. Economic consequences of World War I. Shaping the socialist economic structure during the Interwar period 2. The Great Depression. Keynes's Analysis |

| | | |
|--|--|---|
| | | <p>3. From World War II to the crisis of the 1970s. From the Werner Plan to the European Monetary Union. The current financial crisis and its consequences</p> |
|--|--|---|

6. Methodology and working plan

Methodology and Teaching Plan

Lectures consist of the basic contents and presentations of the key concepts for each topic. In addition, students could use the support material in the Virtual Campus, i.e. visual presentations used by the instructor.

Classroom practices basically consist of an analysis of certain recommended readings. Sometimes the practices may be related with news or motivated by present-day cases. It is also possible to have training on searching sources or on managing historical data, as well as having oral presentations by working groups. It is worth noting that the classroom practices are a complement to the Lectures and shed light on them.

The four themes of the subject are the main objective of each Group Tutorial session. They are planned as a little presentation by one of the working groups followed by a discussion and feedback from the students, with the instructor chairing and moderating the talks.

Sometimes a short surprise exam may be held. This will normally consist of only one question, and the answer will be covered by a short paragraph (no more than 10 lines). With these, students can obtain up to a maximum of 0.5 points.

The content of the final written exam, which is compulsory for each student, will be based on the lectures and the topics covered in the practical classes and tutorials.

| | | | |
|--|--|----------------------------------|--------------------------------------|
| | | WORK REQUIRING ATTENDANCE | WORK NOT REQUIRING ATTENDANCE |
|--|--|----------------------------------|--------------------------------------|

| <i>Lessons</i> | <i>Total Hours</i> | <i>Lectures</i> | <i>Classroom Practices</i> | <i>Seminars</i> | <i>Group Tutorials</i> | <i>Evaluations Sessions</i> | <i>Total</i> | <i>Team Work</i> | <i>Individual Work</i> | <i>Total</i> |
|--|--------------------|-----------------|----------------------------|-----------------|------------------------|-----------------------------|--------------|------------------|------------------------|--------------|
| From the first economic revolution to the decadence of the ancient world | | 2.0 | 2.0 | | | | 4 | | 6 | 6 |
| The economic evolution of feudal society | | 2.0 | 2.0 | | | | 4 | | 6 | 6 |
| The expanding economy of Europe during the 15th and 16th centuries | | 2.0 | 2.0 | | | | 4 | 5 | 6 | 11 |
| The economic evolution of the Modern Age. The growth of Classical Political Economy | | 2.0 | 2.0 | | 1.25 | | 5.25 | | 6 | 6 |
| Industrial Revolution and industrialisation | | 2.0 | 2.0 | | | | 4 | | 6 | 6 |
| Industrialisation in the northern and central European countries | | 2.0 | 2.0 | | | | 4 | | 6 | 6 |
| Industrialisation of the southern European countries | | 2.0 | 1.75 | | | | 3.75 | | 6 | 6 |

| | | | | | | | | | | |
|---|------------|-------------|-------------|--|------------|------------|-------------|-------------|-----------|-------------|
| The economic growth of the United States | | 2.0 | 1.75 | | | | 3.75 | 5 | 6 | 11 |
| Economic evolution of the occidental countries from 1874 to 1914 | | 1.0 | 1.75 | | 1.25 | | 4 | | 5 | 5 |
| Economic consequences of World War I. Shaping the socialist economic structure during the Interwar period | | 2.0 | 1.75 | | | | 3.75 | 5 | 6 | 11 |
| The Great Depression. Keynes's Analysis | | 1.75 | 1.75 | | 1.25 | | 4.75 | 5 | 8 | 13 |
| From World War II to the crisis of the 1970s. From the Werner Plan to the European Monetary Union. The current financial crisis and its consequences | | 1.75 | 1.75 | | 1.25 | 5 | 9.75 | | 8 | 8 |
| Total Hours | 150 | 22.5 | 22.5 | | 5 | 5 | 55 | 20 | 75 | 95 |
| (%) | 100 | 15 | 15 | | 3.3 | 3.3 | 36.7 | 13.3 | 50 | 63.3 |

| Week | Work requiring attendance | Work not requiring attendance |
|-------------|---|---|
| 1 | From the first economic revolution to the decadence of the ancient world | Previous compulsory readings, schemes and handouts. Recommended optional readings |
| 2 | The economic evolution of feudal | Previous compulsory readings, schemes |

| | | |
|-----------|--|---|
| | society | and handouts. Recommended optional readings |
| 3 | The expanding economy of Europe during the 15th and 16th centuries | Tasks for preparing the first Group Tutorial (See the Practical notebook). Working group meeting |
| 4 | The economic evolution of Modern Age. The growth of Classical Political Economy | Previous compulsory readings, schemes and handouts. Recommended optional readings |
| 5 | Industrial Revolution and industrialisation | Previous compulsory readings, schemes and handouts. Recommended optional readings |
| 6 | Industrialisation in the northern and central European countries | Previous compulsory readings, schemes and handouts. Recommended optional readings |
| 7 | Industrialisation of the southern European countries | Previous compulsory readings, schemes and handouts. Recommended optional readings |
| 8 | The economic growth of the United States | Tasks for preparing the second Group Tutorial (See the Practical notebook). Working group meeting |
| 9 | Economic evolution of the occidental countries from 1874 to 1914 | Previous compulsory readings, schemes and handouts. Recommended optional readings |
| 10 | Economic consequences of World War I. Shaping the socialist economic structure during the Interwar period | Tasks for preparing the third Group Tutorial (See the Practical notebook). Working group meeting. |
| 11 | The Great Depression. Keynes's Analysis | Previous compulsory readings, schemes and handouts. Recommended optional readings. Tasks for preparing the four |

| | | |
|----|---|--|
| | | Group Tutorial (See the Practical notebook). Working group meeting. |
| 12 | From World War II to the crisis of the 1970s. From the Werner Plan to the European Monetary Union. The current financial crisis and its consequences | Previous compulsory readings, schemes and handouts. Recommended optional readings. |

7. Evaluation of the student's learning results

Assessment

The student's knowledge attained in the course shall be evaluated through two different elements:

1. continuous evaluation accounts for 40% of the final mark
2. the final exam accounts for 60% of the final mark

1. To reach the learning objectives, and thus to gain good marks, the students need to work actively in the preparation of the Group Tutorials. The feedback provided through an active participation of the students is strongly encouraged. There are various activities required to prepare the meetings at the Group Tutorials, according to the aim and content of each group of topics that you can see in the Practical notebook (check Virtual Campus). The compulsory readings, schemes of the visual presentations, handouts and also the recommended optional readings should be helpful as well.
2. Sometimes student participation will be required for a discussion or for answering a question on the topic delivered. Comment of some readings can also be asked for.
3. Working groups could carry out some research through the use of historical statistics, interpretation of historical documents, secondary sources, etc. Afterwards the groups can prepare an oral presentation to explain their results (15 minutes maximum) and discuss them in class.
4. Part-time student's knowledge attained in the course shall be evaluated through a final exam.

Summary Table

| Assessment | Activities | Weight in final grade (%) |
|------------|--|---------------------------|
| Continuous | <ul style="list-style-type: none"> • Activity 1: active participation in Lectures/ Practices • Activity 2: active participation in Group Tutorials | 10 |

| | | |
|-------------------|--|----|
| | <ul style="list-style-type: none"> Activity 3: Minor research/oral presentation(working groups) | 20 |
| | | 10 |
| Final Exam | Written exam on any material covered in lectures or classroom practices and group tutorials | 60 |

8. Resources, bibliography and complementary documentation

Resources, Bibliography and Additional Information.

ALDCROFT, Derek H., *The european economy, 1914-2000*, Routledge, 2001.

CAMERON, Rondo/ NEAL, Larry, *A concise economic history of the World. From Paleolithic Times to the Present*, Oxford University Press, New York, 2003.

HOBBSAWM, Eric, *Age of Extremes. The short twentieth century, 1914-1991*, Abacus, London, 1996.

LANDES, David S., *The wealth and poverty of nations. Why some are so rich and some so poor*, Little, Brown and Company, London, 1998.

LANDRETH, Harry/ COLANDER, David C., *History of Economic Theory*, Houghton Mifflin Co., Boston, 1989.

NORTH, Douglas C., *Structure and change in economic history*, W. W. Norton & Company, 1982.

POLLARD, Sidney, *Peaceful conquest: The industrialization of Europe, 1760-1970*, Oxford University Press, Oxford, 1981.

Di VITTORIO, Antonio (dir.), *An Economic History of Europe: from Expansion to Development*, London, Routledge, 2006.

- COMPLEMENTARY REFERENCES**

The reports or the handbooks recommended for each topic. Moreover, there are other references apart from those cited in the basic bibliography for specific parts of the programme (theoretical and practical). Please have a look to the topic references inside the note book.

- **MAIN WEB PAGES**

http://www.uc3m.es/uc3m/dpto/HISEC/general/recursos_online.html

<http://www.upf.edu/iuhjvv/index.htm>

<http://www.economics.harvard.edu/>

<http://www.lse.ac.uk/collections/economicHistory/>

<http://www.iue.it/>

<http://www.aehe.net/>

Subject Guide

1. Information about the subject

| | | | | |
|----------------------------------|---|-------------------------|--|--|
| SUBJECT | Introducción a la Estadística Económica/Introduction to Economics Statistics | | CODE | GADEMP01-1-003/GECONO01-1-005 GCONFI01-1-001/GRLYRH01-1-006 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Accounting and Finance Degree in Economics Degree in Labour Relations and Human Resources | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Formación Básica/Basic | N° TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
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2. Context

The course Introduction to Economic Statistics is a basic training in a Business Administration degree. It is a course common to the degrees in Economics, Accounting and Finance and Labour Relations and Human Resources, which are also part of the course catalog of the School of Economics and Business. For the degrees in a Business Administration, Economics and Accounting and Finance this subject is in the module Quantitative Methods and in the Statistical matter; whereas for the degree in Labor Relations and Human Resources it is in the matter Sociology of the Work and Technologies of Social Investigation.

From an educational perspective, two reasons can be highlighted in order to justify the teaching of statistics at undergraduate level:

1. Statistics is useful for a future career in economics-business.
2. Knowledge of statistics as a part of general education is desirable for all citizens.

Indeed, professionals in economics and business regularly deal with large amounts of numerical data that require adequate treatment to be really informative and useful in decision-making. Also, mass-media give us daily news based on statistical information on different areas of present social and economic conditions (unemployment numbers, TV ratings, opinion polls, etc.) to be interpreted properly by the public.

In this context, the course in statistics in the first undergraduate year aims to introduce students to statistical reasoning, providing basic training to enable them to apply different analytical tools to economic and social problems. This training will be supplemented with compulsory and optional courses in later years.

3. Requirements

The course has no prerequisites. It is recommended that the student should be competent in mathematics, in any of its options, at secondary (high school) level.

4. Competencies and learning results

To achieve the overall objectives, the course will pay attention to the following **generic skills**:

- Capacity for analysis and synthesis.
- Learning capability.
- Skill at searching for and analyzing information in the working environment.
- Ability to use ICT tools.
- Capability for working independently.
- Critical and self-critical capability.
- Capability for putting knowledge into practice.
- Concern for quality and good work.
- Values and ethics.

The **specific skills** developed in the course are:

- To identify and apply appropriate quantitative tools to the analysis of economic information.
- To use and interpret specific data processing software.
- To transmit information, ideas, problems and solutions in the area of business management to a specialist or non-specialist audience.

The former general and specific skills are specified in the following **learning outcomes**:

- Application of descriptive statistical tools to solve problems in economics and business.
- Description of basic concepts related to socio-economic statistics
- Ability to access the main sources of statistical information and interpretation of results.
- Ability to handle the spreadsheet to solve statistical problems.

5. Contents

The program is divided into 11 lessons grouped into three blocks: a first block, corresponding to lessons 1-4, focuses on the study of univariate statistics. The second block, which covers lessons 5-6, studies sets of variables and their relationships. The common feature of the third block, corresponding to lessons 7-11, is the analysis of variables from a temporal approach.

5.1. Program in brief

Lesson 1: Organization and presentation of data: statistical sources

Lesson 2: Measures of central tendency and partition values

Lesson 3: Measures of dispersion

Lesson 4: Measures of inequality and poverty

Lesson 5: Measures of correlation and association

Lesson 6: Simple regression

Lesson 7: Index Numbers: rates and properties

Lesson 8: Index numbers: standard formulas, change and contributions

Lesson 9: The Consumer Price Index (CPI) and its applications

Lesson 10: Time series: general approach and trend analysis

Lesson 11: Time series: seasonal variations and forecasting

5.2. Detailed program and learning objectives**Lesson 1. Organization and presentation of data: statistical sources****Contents:**

- 1.1 .- Sources of information: censuses and samples
- 1.2 .- Types of statistical information
- 1.3 .- Presentation of data: tables and graphs
- 1.4 .- National and European statistical systems
- 1.5 .- Statistical sources of economic information

Objectives:

The lesson has two distinct parts, the first one dealing with the introduction of basic statistical concepts and terminology and also with the methods of tabulation and graphical representation of statistical information. The second part is devoted to the study of the general features of the official statistical system and some socio-economic statistical sources.

From this perspective, specific learning objectives to be pursued by students are to:

- Describe data collection procedures and to distinguish between census and sample surveys.
- Manage frequency tables of grouped and ungrouped data, differentiating the types of frequencies and their relationships.
- Choose appropriate graphs to represent a set of data and recognize errors in graphical representations present in the media.
- Know the basic characteristics of national and European statistical systems.
- Describe the main characteristics of some socio-economic statistics compiled by the INE.
- Search for socio-economic statistical information on the websites of official statistical agencies.

Additional Material:

BERENSON, M.L., et al. (2010): Basic Business Statistics. Concepts and applications. Pearson International. [Chapters 1 and 2]

PÉREZ, R.; CASO, C.; RÍO, M.J. and LÓPEZ, A.J. (2011): *Introducción a la Estadística Económica*. [online]. Chapter 1.

Lesson 2. Measures of central tendency and quantiles**Contents:**

2.1. Measures of central tendency: averages

2.2. Quantiles

Objectives:

This lesson introduces the different types of measures for summarizing or synthesizing the behaviour of a data set. The approach followed in this lesson will help students to achieve the following learning objectives:

- Calculating and interpreting various averages: arithmetic mean, weighted mean, median and mode.
- Comparing the properties of the arithmetic mean, median and mode.
- Calculating and interpreting various quantiles (deciles, quartiles, and percentiles).

Additional Material:

BERENSON, M.L., et al. (2010): Basic Business Statistics. Concepts and applications. Pearson International. [Chapter 3]

PÉREZ, R.; CASO, C.; RÍO, M.J. and LÓPEZ, A.J. (2011): *Introducción a la Estadística Económica*. [online]. Chapter 2.

Lesson 3. Measures of dispersion

Contents:

3.1 .- Measures of absolute dispersion

3.2 .- Measures of relative dispersion

3.3 .- Standardized variables

Objectives:

This lesson presents the different types of measures for analyzing the variability of a dataset and the representativeness of the averages. It also studies the concept of the standardized variable. The learning objectives to be achieved are:

- To quantify the variability or dispersion of a distribution through measures of absolute dispersion.
- To study the properties of the variance and standard deviation.
- To calculate and interpret coefficients of variation.
- To compare the representativeness of averages.
- To compare values from different distributions by means of standardized variables.

Additional Material:

BERENSON, M.L., et al. (2010): Basic Business Statistics. Concepts and applications. Pearson International. [Chapter 3]

PÉREZ, R.; CASO, C.; RÍO, M.J. and LÓPEZ, A.J. (2011): *Introducción a la Estadística Económica*. [online]. Chapter 3.

Lesson 4. Measures of inequality and poverty**Contents:**

4.1 .- Poverty measures

4.2 .- Economic inequality

4.3 .- The Lorenz curve and the Gini index

Objectives:

This lesson introduces the need to quantify the disparities in the distribution of economic variables, such as family income, wages, etc., by a set of inequality and poverty indicators. The learning objectives to be achieved are to:

- Appreciate the importance of the phenomenon of economic inequality.
- Plot Lorenz curves and interpret their meaning in relation to inequality.
- Quantify the inequality by the Gini index.
- Apply the desirable properties of inequality measures.
- Define poverty.
- Calculate and interpret measures of poverty.

Additional Material:

Notes on the lesson available at the Virtual Campus www.campusvirtual.uniovi.es

PÉREZ, R.; CASO, C.; RÍO, M.J. and LÓPEZ, A.J. (2011): *Introducción a la Estadística Económica*. [online]. Chapter 4.

Lesson 5. Measures of correlation and association**Contents:**

5.1. Two-dimensional distributions

5.2. Marginal distributions

5.3. Statistical dependence and independence

5.4. Measuring correlation

5.5. Measures of association in contingency tables

Objectives:

This lesson addresses the joint study of two characters and the possible relationships between them. The learning objectives to be achieved are to:

- Appreciate the interest of the joint study of several characters.
- Construct and interpret tables and two-dimensional scatter plots.
- Build marginal distributions.
- Recognize and interpret the possible relationship between two variables: functional independence, statistical independence and statistical dependence.
- Calculate and interpret measures of linear dependence: covariance and linear correlation coefficient.
- Quantify the degree of association between two attributes by Pearson's contingency coefficient.

Additional Material

BERENSON, M.L., et al. (2010): Basic Business Statistics. Concepts and applications. Pearson International. [Chapter 3]

PÉREZ, R.; CASO, C.; RÍO, M.J. and LÓPEZ, A.J. (2011): *Introducción a la Estadística Económica*. [online]. Chapter 5.

Lesson 6. Simple Regression

Contents:

6.1 .- Correlation and regression

6.2 .- Least squares regression

6.3 .- Goodness of fit analysis

6.4 .- Forecasting with causal models

Objectives:

This lesson examines the procedures for building explanatory models from the joint information of two statistical variables mutually correlated. From this perspective, specific learning objectives to be pursued by students are to:

- Distinguish the concepts of correlation and regression and analyze the connection between them.
- Calculate regression lines by least squares adjustment.
- Interpret the coefficients of the regression line.
- Analyze the goodness of fit of a model by the coefficient of determination.
- Calculate predictions from causal models and to analyze its reliability.

Additional Material:

BERENSON, M.L., et al. (2010): Basic Business Statistics. Concepts and applications. Pearson International. [Chapter 13]

PÉREZ, R.; CASO, C.; RÍO, M.J. and LÓPEZ, A.J. (2011): *Introducción a la Estadística Económica*. [online]. Chapter 6.

Lesson 7. Index numbers: rates and properties

Contents:

7.1 .- Simple index numbers and rates

7.2 .- Synthetic index numbers

7.3 .- Properties of the index numbers

Objectives:

The last part of the program is devoted to the study of the temporal evolution of economic variables. Specifically, this lesson addresses the comparison of the values of a variable between different time periods through the calculation of index numbers and rates of change. The learning objectives to be achieved are to:

- Obtain and interpret simple temporal and spatial indices.
- Calculate and interpret different types of rates of change (monthly, annual...)
- Describe the desirable properties of index numbers.

Additional Material:

BERENSON, M.L., et al. (2010): Basic Business Statistics. Concepts and applications. Pearson International. [Chapter 16]

PÉREZ, R.; CASO, C.; RÍO, M.J. and LÓPEZ, A.J. (2011): *Introducción a la Estadística Económica*. [online]. Chapter 8.

Lesson 8. Index numbers: standard formulas, change and contributions**Contents:**

8.1.- Standard formulas for price and quantity index numbers

8.2.- Chain indices

8.3.- Change of an index number and individual contributions

Objectives:

This lesson explores the formulas most commonly used for constructing a synthetic index in the field of economics. It also addresses the measurement of the change on a synthetic index between two points in time. The learning objectives to be achieved are:

- Obtaining and interpreting price and quantity Laspeyres' and Paasche's formulae.
- Calculating rates and analyzing advantages and disadvantages of chain index numbers.
- Calculating and interpreting the relative change of a weighted-average composite index and the individual effect of each component.

Additional Material:

Notes on the lesson available at the Virtual Campus www.campusvirtual.uniovi.es

PÉREZ, R.; CASO, C.; RÍO, M.J. and LÓPEZ, A.J. (2011): *Introducción a la Estadística Económica*. [online]. Chapter 9.

Lesson 9. The Consumer Price Index (CPI) and its applications

Contents:

9.1 .- The Consumer Price Index (CPI)

9.2 .- The Harmonized CPI (HCPI)

9.3 .- Applications of the CPI: the problem of deflation

Objectives:

This lesson continues with the study of index numbers and extends its applications in an economic context. The lesson focuses on the Consumer Price Index (CPI) and its role as a deflator. These contents will allow the students to achieve the following objectives:

- To describe the objectives and the basic features of the Spanish CPI (base 2011)
- To describe the basic features of the HCPI.
- To distinguish between variables at current prices and constant prices.
- To define the concept of deflation and transform series into constant prices in order to analyze the real evolution of economic variables.

Additional Material:

INE Web <http://www.ine.es>

- CPI and HCPI methodologies
- Household Budget Survey (HBS) methodology

PÉREZ, R.; CASO, C.; RÍO, M.J. and LÓPEZ, A.J. (2011): *Introducción a la Estadística Económica*. [online]. Chapter 10.

Lesson 10. Time series: general approach and trend analysis**Contents:**

- 10.1 .- Temporal evolution of variables
- 10.2 .- Components of a time series
- 10.3 .- Trend analysis

Objectives:

This lesson begins the study of time series from a classical perspective, through the analysis of its components. The approach taken in this lesson must allow the students to achieve the following learning objectives:

- To describe the components of a time series.
- To identify the type of model of a time series.
- To obtain the trend by moving average methods and adjustment.

Additional Material:

BERENSON, M.L., et al. (2010): Basic Business Statistics. Concepts and applications. Pearson International. [Chapter 16]

PÉREZ, R.; CASO, C.; RÍO, M.J. and LÓPEZ, A.J. (2011): *Introducción a la Estadística Económica*. [online]. Chapter 11.

Lesson 11. Time series: seasonal variations and forecasting**Contents:**

11.1 .- Analysis of seasonal variations

11.2 .- Seasonal adjustment

11.3 .- Forecasting

Objectives:

This lesson continues the study of time series from a classical perspective, analyzing the seasonal component. The learning objectives to be achieved are:

- Application of the appropriate procedure to identify the seasonal component.
- Interpreting the seasonal component.
- Adjusting seasonally a time series.
- Obtaining forecasting of time series and analyze its reliability.

Additional Material:

BERENSON, M.L., et al. (2010): Basic Business Statistics. Concepts and applications. Pearson International. [Chapter 16]

PÉREZ, R.; CASO, C.; RÍO, M.J. and LÓPEZ, A.J. (2011): *Introducción a la Estadística Económica*. [online]. Chapter 12.

6. Methodology and working plan

The program is divided into lessons that correspond to weekly teaching units. The face-to-face teaching is based on two types of activities: lectures and classroom practices, with weekly sessions of an hour and a half each. These activities are complemented by practical sessions in the computer lab.

In this context, the work plan for the activities will be:

- Lectures: These classes will consider the overall motivation of the subject. They are based on real situations in the economic field and will give an overview of the theoretical part of each lesson, with particular attention to the key concepts and the most important developments.
- Classroom practices: These sessions will solve theoretical and practical issues and statistical assumptions related to economics and business with the support of the tools introduced in the lectures.
- Lab Sessions: The students will have in these sessions the opportunity to study theoretical problems as well as to solve practical problems in smaller sub-groups, will facilitate tracking of their activities by the professor. Working with the worksheet will be one of the main tools in these sessions.

The teaching methodology and work plan is based on the Virtual Campus www.campusvirtual.uniovi.es in two ways:

- As the reference site to look up and download educational resources, since students have access to all the materials necessary for the monitoring of the course beforehand: lectures presentations, instructions and data bases for practice sessions, a collection of suggested exercises for autonomous work and solved problems in every part of the program.
- As an area of active participation for the student in the process of learning: self-assessment tests, discussion forums, on-line tutorials, etc.

The materials in the Virtual Campus are supplemented by references to handbooks of economic statistics, available for consulting and loaning from the Library of Legal and Social Sciences <http://buo.uniovi.es/>, and relevant web references with statistical resources.

The following table summarizes the schedule for each type of activity of the course. Besides the classroom activities described above, an additional 65% is also included corresponding to the total workload of activities that do not require attendance. They are distributed among the study of the topics of the course and proposed tasks and evaluable activities.

| | | | |
|--|--|----------------------------------|--------------------------------------|
| | | WORK REQUIRING ATTENDANCE | WORK NOT REQUIRING ATTENDANCE |
|--|--|----------------------------------|--------------------------------------|

| <i>Lessons</i> | <i>Total Hours</i> | <i>Lectures</i> | <i>Practical classes</i> | <i>Computer Classroom Practices</i> | <i>Evaluations Sessions</i> | <i>Total</i> | <i>Individual Work</i> | <i>Total</i> |
|----------------|--------------------|-----------------|--------------------------|-------------------------------------|-----------------------------|--------------|------------------------|--------------|
| 1 | 6.5 | 2 | 1.5 | | | 3.5 | 3 | 3 |
| 2 | 11,5 | 2,5 | 2 | 1 | | 5,5 | 6 | 6 |
| 3 | 9 | 1.5 | 1.5 | | | 3 | 6 | 6 |
| 4 | 10 | 2 | 2 | | | 4 | 6 | 6 |
| 5 | 11 | 2.5 | 2 | 0.5 | | 5 | 6 | 6 |
| 6 | 15 | 3 | 3.5 | 0.5 | | 7 | 8 | 8 |
| 8 | 11.5 | 2 | 1.5 | 1 | | 4.5 | 7 | 7 |
| 9 | 12 | 2.5 | 2.5 | | | 5 | 7 | 7 |
| 10 | 11 | 1.5 | 1.5 | 1 | | 4 | 7 | 7 |
| 11 | 10.5 | 2 | 1.5 | | | 3.5 | 7 | 7 |
| 12 | 10 | 1.5 | 1.5 | | | 3 | 7 | 7 |
| Final exam | 32 | | | | 5 | 5 | 27 | 27 |

| | | | | | | | | |
|--------------------|------------|---------------|---------------|--------------|--------------|---------------|---------------|---------------|
| Total Hours | 150 | 23 | 21 | 4 | 5 | 53 | 97 | 97 |
| (%) | | 15.33% | 14.00% | 2.67% | 3.33% | 35.33% | 64.67% | 64.67% |

The second semester of the 2015-2016 academic year is divided into 14 weeks. Below is an indicative timetable, common to all groups of the subject. Therefore, it may vary slightly depending on the specific weekly schedule of each group.

| Week | Work requiring attendance | Work not requiring attendance |
|-------------|---|---|
| 1 | Introduction to the course Lesson 1.- Organization and presentation of data. Statistical sources | Study of lesson 1 Look up statistical databases at the INE website |
| 2 | Lesson 2.- Measures of central tendency and partition values | Study of lesson 2 |
| 3 | Lesson 2.- Measures of central tendency and partition values Lesson 3.- Measures of dispersion | Study of lesson 2 and 3 |
| 4 | Lesson 4: Measures of inequality and poverty | Study of lesson 4 |
| 5 | Lesson 4: Measures of inequality and poverty Lesson 5: Measures of correlation and association | Study of lesson 4 |
| 6 | Lesson 5: Measures of correlation and association | Study of lesson 5 |
| 7 | Lesson 6.- Simple Regression | Study of lesson 6 |

| | | |
|----|---|---|
| 8 | Lesson 7.- Index numbers: rates and properties | Study of lesson 7 |
| 9 | Lesson 8: Index numbers: standard formulas, change and contributions | Study of lesson 8 |
| 10 | Lesson 8: Index numbers: standard formulas, change and contributions Lesson 9: The Consumer Price Index (CPI) and its applications | Study of lesson 8 Look up the CPI data in the website of the INE |
| 11 | Lesson 9: The Consumer Price Index (CPI) and its applications | Study of lesson 9 |
| 12 | Lesson 10.- Time series: general approach and trend analysis | Study of lesson 10 |
| 13 | Lesson 11: Time series: seasonal variations and forecasting | Study of lesson 11 |
| 14 | Lesson 11: Time series: seasonal variations and forecasting | Study of lesson 11 Preparation of the final exam |

7. Evaluation of the student's learning results

The evaluation of the course is based on two elements:

1. **Continuous assessment**, which will value the effort and work developed by the student throughout the course by means of different types of individual activities. The weight in the final grade is 40%.
2. **Final exam**, which will assess the knowledge acquired by the student as well as his/her capabilities to apply the statistical tools when analyzing and solving problems in the field of economics and business. The weight of this exam in the final grade is 60%.

The final grade (CFINAL) will be obtained as a weighted average of the final exam grade (CEXAM) and the continuous assessment (CCONT):

$$\mathbf{CFINAL = 0.6 \cdot CEXAM + 0.4 \cdot CCONT}$$

The continuous assessment activities are conducted throughout the semester, and assignments must be fulfilled within the deadlines set by the teachers in order to verify that the students achieve the learning outcomes set on each part of the syllabus. The continuous evaluation activities will not be repeated in the extraordinary examination periods, but the grades obtained during the semester will be maintained for all examination periods throughout the academic year.

Differentiated assessment

For students benefiting from the system of differentiated assessment, the final exam will keep the weight of 60%. The activities of continuous assessment performed by full-time students throughout the semester will be replaced by several theoretical and practical issues, with a weight of 40%.

8. Resources, bibliography and complementary documentation

The main teaching resources of the subject will be available on the Virtual Campus www.campusvirtual.uniovi.es (presentations, case studies, documents, etc).

The basic bibliography is a freely downloadable online book (in Spanish) and a textbook (in English). These references, as well as other study material for the course, are the following:

Basic Bibliography

BERENSON, M.L., LEVINE, D.M. and T.C. KREHBIEL (2010): *Basic Business Statistics. Concepts and applications*. Pearson International.

PÉREZ, R.; CASO, C.; RÍO, M.J. and LÓPEZ, A.J. (2011): *Introducción a la Estadística Económica*. [in Spanish] < freely downloadable at <http://goo.gl/Tkn8g> >..

Further reading

CASAS, J.M. y J. SANTOS (2002): *Introducción a la Estadística para Economía* (2ª ed.). Ed. Centro de Estudios Ramón Areces.

GUPTA, P.N. (2005): *Comprehensive Business Statistics*. Laxmi Publications.

MARTÍN, F.J. (2004): *Introducción a la Estadística Económica y Empresarial* (teoría y práctica) (3ªed.). Ed. Thomson-Paraninfo.

MARTÍN-GUZMÁN, P.; TOLEDO, I.; LÓPEZ, F.J. y N. BELLIDO (2006): *Manual de Estadística Descriptiva*. Ed. Civitas.

MONTERO, J.Mª. (2000): *Estadística para Relaciones Laborales*. Ed. AC.

MOORE, D. (1996): *Statistics: Concepts and Controversies* (4ª ed.). Ed. W.H. Freeman and Company.

MURES, M^aJ. (2003): *Problemas de Estadística Descriptiva aplicada a las Ciencias Sociales*. Ed. Prentice Hall.

PÉREZ, R.; LÓPEZ, A.J.; RÍO, M.J.; MUÑOZ, N.; CASO, C.; ALVARGONZÁLEZ, M. y J.B. GARCÍA (1997): *Análisis de datos económicos I. Métodos descriptivos*. Ed. Pirámide.

URIEL, E. y M. MUÑIZ (1993): *Estadística Económica y Empresarial. Teoría y Ejercicios*. Ed. AC.

Worksheet references

ARNALDOS, F.; DÍAZ, M.T.; FAURA, U.; MOLERA, L.; PARRA, I. (2003): *Estadística Descriptiva para Economía y Administración de Empresas*. Editorial AC.

GLYN, D. and P. BRANKO (2010): *Business Statistics using Excel*. Ed. Oxford.

Websites

| Institution | Web |
|--|---|
| National Statistics Institute (INE) | http://www.ine.es |
| Statistical Office of the European Union (EUROSTAT) | http://ec.europa.eu/eurostat |
| Sociedad Asturiana de Estudios Económicos e Industriales (SADEI) | http://www.sadei.es |
| Bank of Spain | http://www.bde.es |

Software

The sessions in the computer lab will be with freeware, mainly with Calc worksheet of LibreOffice, which is available at <http://www.libreoffice.org/>.

Subject Guide

1. Information about the subject

| | | | |
|---|---|---------------------------|--|
| SUBJECT | Matemáticas/Mathematics | | CODE GADEMP01-1-004/GECONO01-1-007 GCONFI01-1-003 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Accounting and Finance Degree in Economics | CENTER | Facultad de Economía y Empresa School of Economics and Business |
| TYPE | Formación Básica/Basic | N° TOTAL CREDITS | 6.0 |
| PERIOD | First Semester | LANGUAGE | Castellano English |
| COORDINATORS/ES | | EMAIL | |
| PEREZ GLADISH BLANCA MARIA | | bperez@uniovi.es | |
| LECTURERS | | EMAIL | |
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2. Context

The subject "Mathematics" is the first contact that students have with maths in the degree of Business Administration. This course belongs to the module of Quantitative Methods, subject Mathematics and it is taught in the first semester of the first year.

There are many disciplines that use mathematical models in their development as well as to obtain their results, like Economic Theory, Business Economics and Statistics. With this course, students try to understand and manage the basic techniques of linear algebra and mathematical analysis, which are the main tools to raise and discuss, in a rigorous manner, economic and business problems.

3. Requirements

It is recommended that students understand basic mathematical language, the concepts of number sets and matrices and that they understand and are able to work in an intuitive, geometrical formal way with the functions of one variable (elementary functions).

4. Competencies and learning results

Upon successful completion of the course students will be able to:

- Analyze and summarize information.
- Learn
- Use different software and new information and communication technologies.
- Work effectively as an individual and in teams.
- Critically evaluate decisions.
- Make decisions.
- Apply knowledge and understanding of the mathematical tools to the resolution of business problems.
- Find solutions to different problems in a creative way.
- Adapt to new situations.
- Appraise the value of quality, well done work.

And more specifically, students will be able to:

- Identify and apply the quantitative techniques to the analysis of economic information.
- Spread information, ideas, problems and solutions in the business field to both, experts and non experts.
- Build, analyze and solve in an exact or approximate way mathematical models in different socio-economic fields.

Upon completion of the course the student should also:

- Understand and be able to work with algebraic linear manipulations in differential calculus.
- Understand basic fundamental concepts related to one or several variable functions: continuity, derivatives and differentiation.
- Understand financial laws and their application to make decisions concerning financial and investment issues.

5. Contents

SHORT PROGRAM:

MODULE I. Differential Calculus.

1. Functions of Several Variables
2. Derivatives and Differentiability of functions with several variables
3. Homogeneous Functions

MODULE II. Financial Mathematics.

4. Basic Fundamentals
5. Basic Financial Transactions

MODULE III. Linear Algebra.

6. Matrices and Linear Equation Systems

FULL PROGRAM:

MODULE I. Differential Calculus.

1. Functions of Several Variables.
 - 1.1. Introduction to the Metric Space.
 - 1.2 Functions of Several variables as Instruments of Economic Modelling.
 - 1.2. Elementary Functions of Several Variables.
 - 1.3. Geometric Representation. Level Curves.
 - 1.4. Limits and Continuity.
2. Derivatives and Differentiability of Functions of Several Variables.
 - 2.1. Partial Derivatives. Gradient Vector.
 - 2.2. Higher-Order Derivatives. Hessian Matrix.
 - 2.3. Differentiability and Differential of a Function of Several Variables.
 - 2.4 Taylor Polynomial.

- 2.5. Composite Functions.
- 2.6. Implicit Functions.

- 3. Homogeneous Functions.
 - 3.1. Concept.
 - 3.2. Properties.
 - 3.4. Economic Applications.

Upon successful completion of this module students will be able to:

- Use mathematical functions in economic modelling.
- Identify and use continuous functions.
- Understand the concept of derivative of functions with several variables and interpret them economically, appreciating the important role of partial derivatives as a basis for marginal analysis.
- Understand and apply the concept of “differential”.
- Describe economic phenomena with their different explanatory levels through the use of composite functions.
- Understand the importance of implicit functions in the economic modelling.
- Identify and understand homogeneous functions and their economic applications.

MODULE II. Financial Mathematics.

- 4. Basic Fundamentals.
 - 4.1. Financial Capital.
 - 4.2. Principle of Financial Projection. Financial Equivalence and Preference.
 - 4.3. Financial Laws: obtaining and interpretation.
 - 4.4. Financial Operation. Financial Equivalence Principle.
 - 4.5. Equivalent Effective Interest Rates. Nominal Interest Rates.
 - 4.6 Reserve Calculation.
 - 4.7. Commercial Characteristics of a Financial Transaction: unilateral and bilateral.
 - 4.8. Cost and Return of a Financial Operation.
 - 4.9 Theory of Annuities:
 - ♣ Annuities: definition, concepts, clasification.
 - ♣ Constant Annuities: valuation.
 - 4.10 Net Present Value (NPV) and Internal Rate of Return (IRR).

5. Basic Financial Transactions.

5.1. Depósitos bancarios a plazo

5.2. Commercial Discount

5.3. Loans

♣ Simple Loans (unique payment)

♣ Loans amortizable with constant payments (French method)

Upon successful completion of this module students will be able to:

- Understand the Fundamentals of Financial Operations and apply them to financial decision making.
- Use mathematical instruments to assess financial transactions.
- Calculate the current and final value of an Annuity with constant terms.
- Understand and obtain the elements of an amortization table for the French and Simple Loans.
- Use the spreadsheets as Excel software to solve the above described problems.

Primary Text

Knut Sydsaeter and Peter Hammond, Essential Mathematics for Economic Analysis, Third Edition, Financial Times/Prentice Hall, 2008.

MODULE III. Linear Algebra.

6. Matrices and linear equation systems.

6.1. Matrices and vectors.

6.2. Determinants.

6.3. Rank Theory.

6.4. Equation Systems.

Upon successful completion of this module students will be able to:

- Identify the linear behaviour of an economic problem and formulate the corresponding mathematical model.
- Understand the following concepts: vector and linear dependency and independency of a system of vectors.
- Use matrices for the study and representation of linear systems.
- Discuss the existence of solution for a system of linear equations.
- Solve linear equations systems.

6. Methodology and working plan

In class activities

- **Lectures** in which the most important concepts and results are presented accompanied by numerous examples. These classes are taught to the whole group, not necessarily as a lecture, but ensuring active participation of students. The development of these classes is based primarily on written notes, textbook references and Power Point presentations which will be available to students in advance on the website of the subject at the Virtual Campus.
- **Classroom practices and laboratory classes** for the resolution of practical cases, in order to apply the concepts and tools introduced in the lectures to solve problems and to consolidate the acquisition of knowledge and skills by the student. In the development of these classes we will combine guided resolution of exercises by the professor, with individual or group decision work by the student with a subsequent discussion of results. Likewise, students will also practice in the computer room where they can acquire skills in using the selected software for quantitative subjects.
- **Group Tutorials:** conducted in small groups and planned by the professor, that could lead to various goals, such as discussion of theoretical questions and resolution of doubts.

Distance learning activities: It is expected that the student devotes a number of hours to individual study and problem resolution as well as to group work outside the classroom in the virtual campus or by email.

The estimated hours required for each of the different lessons or related activities are displayed in the following tables:

| Lessons | Total Hours | In class activities | | | | | Distance learning activities | | | |
|---------------------------------------|--------------------|----------------------------|-----------------|-------------------------------------|------------------------|----------------------------|-------------------------------------|------------------|------------------------|--------------|
| | | <i>Lectures</i> | <i>Seminars</i> | <i>Computer Classroom Practices</i> | <i>Group Tutorials</i> | <i>Evaluation Sessions</i> | Total | <i>Team work</i> | <i>Individual work</i> | Total |
| 1. Functions with several variables. | 21 | 4 | 3 | | | | 7 | 4 | 10 | 14 |
| 2. Derivatives and Differentiability. | 27 | 5 | 5 | | 1 | | 10 | 5 | 12 | 17 |
| 3. Homogeneous Functions. | 10 | 1.5 | 1.5 | | | | 3 | 4 | 3 | 7 |

| | | | | | | | | | | |
|---|----------------|--------|--------|-------|------|-------|---------------|-----|--------|---------------|
| 4. Fundamentals of Financial mathematics. | 35.5 | 5.5 | 4 | 2 | | | 11.5 | 8 | 16 | 24 |
| 5. Basic Financial Transactions. | 16.5 | 4.5 | 3 | 2 | | | 9.5 | 2 | 5 | 7 |
| 6.Linear Algebra. | 40 | 4.5 | 4.5 | | | | 9 | 4 | 8 | 12 |
| Final Exam | 19 | 1 | | | | 2 | 3 | | 16 | 16 |
| Total Hours | 150 | 26 | 21 | 4 | 0 | 2 | 53 | 27 | 70 | 97 |
| (%) | 100.00% | 17.33% | 14.00% | 2.67% | 0.0% | 1.33% | 35.33% | 18% | 46.67% | 64.67% |

| Week | In class work | Distance learning work |
|-------------|--|---|
| 1 | Functions of several variables. | Study for continuous assessment. Problem solving. |
| 2 | Functions of several variables. | Individual study and problem solving. |
| 3 | Derivatives and Differentiability of Functions of Several Variables. | Individual study and problem solving. |
| 4 | Derivatives and Differentiability of Functions of Several Variables. | Individual study and problem solving. |
| 5 | Derivatives and Differentiability of Functions of Several Variables. | Individual study and problem solving. |

| | | |
|----|---|---|
| 6 | Homogeneous Functions. | Individual and group study and problem solving. |
| 7 | Mathematical Finance. Basic Fundaments. | The student will prepare unit 4 "Matrixes, Determinants and Linear Equation Systems". |
| 8 | Mathematical Finance. Basic Fundaments. | Individual study and problem solving. |
| 9 | Mathematical Finance. Basic Fundaments. | Individual study and problem solving. |
| 10 | Basic Financial Transactions. | Individual and group study and problem solving. |
| 11 | Basic Financial Transactions. | Study for continuous assessment. Problem solving. |
| 12 | Linear Algebra. | Individual study and problem solving. |
| 13 | Linear Algebra. | Individual study and problem solving. |
| 14 | Linear Algebra. | Study for continuous assessment. Problem solving. |

7. Evaluation of the student's learning results

The lecturer will take the role of a guide, to evaluate the students learning processes, not only to assess their results, but also to help them fulfil their objectives through continuous supervision of their work. In addition, the grading system will focus more deeply on testing the skills acquired by students in this subject. This means that, although there will be a final exam, it will not be the only method of evaluation. Great emphasis will be placed on those procedures designed to help supervising the students learning: objective test, short answer test, long answer test, oral test (individual and group tests, presentation of exercises, etc.) and self-evaluation systems.

1. **Continuous assessment:** based on several activities (written or oral) to be done individually or in small groups in the contact hours or in those hours corresponding to the individual study time of the student. **Continuous assessment (30%) will be recoverable in extraordinary exam calls.**

2. **Final exam:** Written exam with theoretical questions and practical exercises.

The final grade, in all the examinations, will be a weighted average of the scores obtained in the continuous assessment and the final exam, rating the continuous assessment with 40% (30% written exams and 10% other activities in the classroom) and the final exam with 60%. Continuous assessment (30% written exams) will be reassessed in extraordinary exams.

Summary Table 1

| Official Announcement | Grading system | Weight in final grade (%) |
|-----------------------|------------------------------------|---------------------------|
| Ordinary Exam | Continuous assessment + Final Exam | 100% |
| Extraordinary Exam | Continuous assessment + Final Exam | 100% |

Summary Table 2

| Assessment | Activities | Weight in final grade (%) |
|------------|---|---------------------------|
| Continuous | <ul style="list-style-type: none"> • Written exams in the classroom (30%) recoverable in extraordinary exams • Other activities (10%) | 40% |
| Final Exam | Written exam with theoretical questions and practical exercises. | 60% |

If the test is a multiple choice test, wrong answers will be penalized.

In the final exam a minimum of 2 points on 6 will be required in order to pass the course.

Discriminant questions (minimum requirements, pre-requisites, about mathematical contents the students are supposed to have dominion on) can be included in different parts of the program in order to ensure that the students have reviewed contents from high school as derivatives and matrices.

Differentiated Assessment Model (applicable to part-time student, semi-distance and distance modalities):

The assessment will consist of three different parts:

1. - Final exam: Written exam with theoretical issues and practical exercises. It will have a value of 75%.
2. – Different activities proposed during the course in the virtual campus. They will have a total value of 10%.
3. - Oral exam, that will take place the day of the final exam consisting of the resolution of issues or problems that appear in the list of proposed problems available for the student since the beginning of the academic course (virtual campus). This part will have a value of 15%.

8. Resources, bibliography and complementary documentation

Ian Jacques, Mathematics for Economics and Business, FT Prentice Hall, 6th Edition, 2009

Virtual Campus:

www.campusvirtual.uniovi.es

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Subject Guide

1. Information about the subject

| | | | | |
|------------------------------|---|-------------------------|--------------------------------|---|
| SUBJECT | Economía Mundial/World Economy | | CODE | GADEMP01-1-006/GECONO01-1-010 GCONFI01-1-005 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Accounting and Finance Degree in Economics | CENTER | Facultad de Economía y Empresa | |
| TYPE | Formación Básica | N° TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| PAÑEDA FERNANDEZ CANDIDO | | paneda@uniovi.es | | |
| LECTURERS | | EMAIL | | |
| Hernandez Nanclares Nuria | | nhernan@uniovi.es | | |
| PAÑEDA FERNANDEZ CANDIDO | | paneda@uniovi.es | | |
| FONSECA CUEVAS MARIA PALMIRA | | pfonseca@uniovi.es | | |
| CABIEDES MIRAGAYA LAURA | | lcabie@uniovi.es | | |
| PEREZ RIVERO JOSE LUIS | | jrivero@uniovi.es | | |

2. Context

The subject “World Economy” fulfils two main functions within the degree programmes in which it is included: firstly, it introduces some of the topics present in introductory texts to economics (trade, finance, growth and development, population, resources and the environment). This has a double purpose. On the one hand, it will provide students with the basic knowledge on these programmes; on the other hand, it establishes a basis for different fields of professional specialization (from the field of external trade and international negotiations to the world of international relations and the organizations involved) and of academic specialization (from the different branches of international economics to economics of development, economics of natural and environmental resources among other topics).

Secondly, by focusing on international issues (trade, mobility of factors, and finance) and on the global dimension of certain problems (development, population, resources and the environment), this subject is intended to reinforce the cosmopolitan background of the students, an element that is especially valuable in the framework of the globalization of the marketplace and the institutions related to global and international issues. In brief, the subject “World Economy” provides students with the basic education regarding business and economy and it is especially valuable in the current era of globalization.

3. Requirements

“World Economy” is an introductory course and does not require students to have previous knowledge in the field.

4. Competencies and learning results

The following list contains the learning goals, which are linked to the general and specific competences related to the material involved in this subject.

Learning outcomes

- To be able to understand the main issues of the world economic environment both individually and through debate in multiple working groups.
- To be able to apply the concepts and basic methodology of economics in order to understand and analyse problems of the world economic environment.
- To learn how to use the most suitable tools for the economic analysis to evaluate the existing interdependence relationships in the studied economic areas.
- To improve the capacity to obtain and interpret the information and material necessary to understand the world economic environment, recognizing the different levels of validity of these sources.
- To strengthen the ability to use computing tools which allow, individually and as a group, to gain a closer understanding of the world economic environment.
- To strengthen the ability to use information technology as a means of communication in an international world economic environment.
- To be able to discuss and debate in a multicultural working group the principal problems presented by the economic, being able to evaluate the technical quality of the different arguments employed.
- To improve the capacity to transmit information and to give informed advice on issues relating to the world economic environment and to be able to synthesize and share, both with their colleagues and with the general public, the results of tasks for which they are, individually or as a group, responsible.
- To accept the need to increase the autonomy in order to deal with problems of the world economic environment, and to be aware of the responsibilities (both individual and collective) with regard to the quality of one's work.

In a nutshell, the global objective of the subject “World Economy” is to give an introduction to the economic analysis and the data necessary to tackle issues related to a) trade and the mobility of factors, b) finance and c) global development. Specifically, the aim is to ensure that students are conscious that international and global issues are an inevitable component of the agenda of our times and that they are able to face them with the basic tools of Economics.

This general objective can be summarized in the following points:

- 1) Knowledge acquisition regarding the basic world economic data and the main sources.
- 2) Training of a solid analytical basis in order to address, at the introductory level, international, commercial and financial issues and the international mobility of economic factors.
- 3) Achievement of an understanding of the key growth factors and the economic dimension of the problems of underdevelopment, together with the most suitable strategies to solve these issues.

4) Achievement of an understanding of the possibilities and limitations of population and resources in development, and the ability to analyse them in an economic framework.

5) Development of the basic knowledge necessary to cope with the subjects on this degree course related to international and global issues.

5. Contents

PROGRAMME AND BASIC BIBLIOGRAPHY

I. International trade and mobility of economic factors

Topic 1.- Basic analysis of international trade

Topic 2.- Trade policies

Topic 3.- International mobility of economic factors

II. International Finance

Topic 4.- Balance of payments and exchange rates

Topic 5.- International monetary relations

III. Global development

Topic 6.- Growth and development

Topic 7.- Population, resources and the environment

SAMUELSON, P. A. and W. D. NORDHAUS (2010): *Economics*, 19^a ed., McGraw Hill, International Edition.

KRUGMAN, P. R. and M. OBSTFELD (2006): *International economics. Theory and policy*, 7^a ed., Pearson (topic 6).

DETAILED PROGRAMME AND OBJECTIVES**Topic 1.- Basic analysis of international trade****Content:**

1.1.- The sources of international trade and classical analysis

1.2.- Neoclassical analysis of international trade

Structure and teaching hours:

After a review of some basic concepts and of the sources of trade, there is an examination of classical analysis, introducing, by means of numerical examples, Adam Smith's absolute advantage and David Ricardo's comparative advantage. Later, the focus shifts to neoclassical analysis to show the effects of free trade both in terms of quantities and prices and of welfare (6 hours, 3 theoretical and 3 practical).

Objectives:

Get to know the international flow of trade.

Understand the following concepts:

- *Autarky and free trade*
- *The open economy, imports and exports, GDP, GNP and national income*
- *Inter- and intra-industry trade*
- *The absolute advantage and the comparative advantage*
- *The opportunity cost*
- *Terms of trade*
- *“Small country” and “large country”*
- *“Consumer surplus” and “Producer surplus”*
- *“The one euro-one vote yardstick”*
- *“The production effect” and “the consumption effect” upon passing from autarky to free trade*

Skills development (analysis, synthesis, application):

- *Numerical analysis of the absolute advantage and the comparative advantage*
- *Graphic analysis of the comparative advantage*

Proposal of two voluntary continuous assessment activities:

- *Country Report* Fixing the format and content of the three parts of the country report alongside the dates for corresponding tests. Every student or group is assigned a specific country.
- *Reading material* to be set (15 pages maximum) alongside the dates for corresponding tests.

Practical component:

Practical application: the effects of the free trade on the exporting country.

Basic bibliography:

SAMUELSON, P. A. and W. D. NORDHAUS (2010), pages 340-344 and 348-351.

Topic 2.- Trade policies**Content:**

2.1.- Tariffs and non-tariff barriers

2.2.- Free trade and protectionism: theory and institutions

Structure and teaching hours:

In the previous topic, free trade was shown to have a generally favourable outcome but the fact is that countries do not always practice it and in many cases protectionism is preferred. In this topic, the different trade barriers (tariffs and non-tariff barriers) are introduced, their effects are analysed and the main arguments in favour of protectionism are examined alongside the institutional framework governing international trade relations (6 hours, 3 theoretical and 3 practical).

Objectives:

Understand the following concepts:

- *Tariffs, specific tariffs and ad valorem tariffs*
- *The “production effect” and “the “consumption effect” of tariffs*
- *Non-tariff barriers*
- *Quotas or quantitative restrictions on importation*
- *Import licenses*

- *Voluntary exports restraints (VERs)*
- *The optimal tariff argument*
- *The infant industry argument*
- *Multilateralism (GATT- OMC) and regionalism (integration)*
- *The most-favoured nation (MFN) clause*
- *The General Agreement on Tariffs and Trade (GATT)*
- *The World Trade Organization (WTO)*
- *Multilateral Trade Negotiations (Kennedy, Tokyo, Uruguay, Doha Rounds)*
- *The GATT, GATS y TRIPS agreements*

Knowledge of the main arguments related to protectionism.

Understanding of international trade relations and their institutional framework.

Skills development (analysis, synthesis, application):

- *The graphical analysis of tariffs*

Practical component:

Exercises on economic activity measures.

Comparison of countries with respect to international trade, based on “Country Report 1: International Trade”.

Basic bibliography:

SAMUELSON, P. A. and W. D. NORDHAUS (2010), pages 351-361.

Topic 3.- International mobility of economic factors

Contents:

3.1.- An economic analysis of the international mobility of labour

3.2.- An economic analysis of multinational corporations

Structure and teaching hours:

Trade theory is based on the perfect mobility of goods and services (free trade) and on the immobility of economic factors but the fact is that it is impossible to understand the modern world without multinationals and migration, which are the key issues of this topic (6 hours, 3 theoretical and 3 practical).

Objectives:

Get to know and understand the following concepts:

- *International movements of capital and inflows and outflows of capital*
- *Direct foreign investments and portfolio investment*
- *Multinational corporations, parent company and subsidiaries*
- *Transfer price*
- *Intra-firm trade*
- *OLI (Ownership, Location, Internalization) paradigm*

Understand the scale and characteristics of migration and of direct foreign investment.

Skills development (analysis, synthesis, application):

- *Graphic analysis of international labour mobility*
- *Analysis of OLI paradigm*

Practical component:

Application: the effects of international labour mobility.

Basic bibliography:

KRUGMAN, P. R. and M. OBSTFELD (2006), pages 159-166 and 168-173.

Topic 4.- Balance of payments and exchange rates**Contents:**

4.1.- The balance of payments

4.2.- The exchange rate

Structure and teaching hours:

The topic corresponding to international finance starts with a presentation of the balance of payments from an accounting perspective and an introduction of exchange rates. The curves of the supply and demand of foreign exchange are derived from the movements of goods and services in order to show the connection of this part with the previous topic, which is focused on trade issues. The topic concludes with an introduction to the long-term point of reference for exchange rates (the Purchasing Power Parity, PPP), which is also significant due to its use in international comparisons (6 hours, 3 theoretical and 3 practical).

Objectives:

Get to know and understand the following concepts and terms:

- *Balance of payments*
- *Flows versus stocks*
- *Income and payments, credits and debits, assets and liabilities*
- *Deficit, surplus*
- *Balance of trade*
- *Current account balance*
- *Net foreign investment*
- *Capital account*
- *Financing capacity and necessity*
- *Financial account*
- *Reserve assets and variations in reserve assets*
- *Balance of balance-of-payments accounts*
- *Foreign currencies and foreign exchange market*
- *Exchange rate*
- *Appreciation and depreciation*
- *Purchasing Power Parity and the Law of One Price*

Skills development (analysis, synthesis, application):

- *Balance of payments accounting*
- *The derivation of foreign exchange market graphs from trade*
- *Shifts in foreign exchange market graphs*

Practical component:

A comparison of countries with respect to international business, based on "Country Report 2: International business".

Balance of payment exercises

Basic bibliography:

SAMUELSON, P. A. and W. D. NORDHAUS (2010), pages 543-561

Topic 5.- International monetary relations**Contents:**

5.1.- The fixed exchange rate and the Gold Standard

5.2.- From the Bretton Woods system to the era of flotation

Structure and teaching hours:

As the most basic elements of exchange rates have been introduced in the previous topic, they must be applied to real cases. This is the aim of the present topic in which the different exchange rate systems are introduced and the three main systems used up to the present time are reviewed (6 hours, 3 theoretical and 3 practical).

Objectives:

Get to know and understand of the following concepts :

- *The international monetary system*
- *Fixed, adjustable peg and flexible (or floating) exchange rates*
- *Revaluation-devaluation; appreciation-depreciation*
- *The Gold Standard*
- *Price specie- flow mechanism*
- *Bretton-Woods System, International Monetary Fund and the World Bank*

Understand the evolution of international monetary relations and their institutional framework.

Skills development (analysis, synthesis, application):

- *Analysis of the price specie-flow adjustment mechanism*
- *Graphic analysis of foreign exchange market intervention*

Practical component:

Exchange rate exercises

Balance of payment and exchange rate exercises

Basic Bibliography:

SAMUELSON, P. A. and W. D. NORDHAUS (2010), pages 557-561.

Topic 6.- Growth and development

Contents:

6.1.- Analysis of growth

6.2.- The problem of underdevelopment and its analysis

Structure and teaching hours:

The possible solution to the problem of poverty and underdevelopment is tied up with the economic growth. In this topic the concept of growth is introduced and the theories are reviewed from the basis of the neoclassical model. In this context, the problem of underdevelopment is introduced and the factors and strategies involved in development are examined, paying special attention to their international dimension (6 hours, 3 theoretical and 3 practical).

Objectives:

Get to know and understand the following concepts:

- *Economic growth*
- *Growth rates and the rule of 70*

- *The neoclassical model of growth*
- *Capital deepening*
- *Technology*
- *Productivity and the total factor productivity*
- *The Growth-accounting approach*
- *The Malthusian trap*
- *Endogenous growth (new theories of growth)*
- *Developed Countries and Developing Countries and Less Developed Countries*
- *The vicious circles of poverty*
- *The Human Development Index*
- *Import substitution and export promotion*

Understand the problem of underdevelopment.

Skills development (analysis, synthesis, application):

- *Graphic analysis of the neoclassical model of growth*

Practical component:

Exercises on growth and development.

Basic bibliography:

SAMUELSON, P. A. and W. D. NORDHAUS (2010), pages 501-510, 514-516 and 521-533.

Topic 7.- Population, resources and the environment

Content:

- 7.1.- Economic analysis of population and natural resources
- 7.2.- Economic analysis of pollution and global environmental problem

Structure and Teaching hours:

Population and resources are key issues in the general analysis of the global economy, as these factors may boost or limit the economic activity. The topic begins with an economic analysis of the population (the economic theory of fertility) and with an analysis of the appropriable natural resources. Following on from this, there is an attempt to tackle an economic analysis of pollution and its links with global environmental problems (6 hours, 3 theoretical, 3 practical).

Objectives:

Get to know and understand the following concepts:

- *Demographic transition, birth rate, fertility and mortality*
- *Renewable vs. non-renewable resources*
- *Appropriable vs. inappropriable resources*
- *The Kuznets curve and the environmental Kuznets curve*
- *Limits to growth and sustainable development*
- *Externalities*
- *Global public goods*
- *The United Nations Conference on Environment and Development (the "Earth Summit")*
- *The hole in the ozone layer and the Montreal Protocol*
- *Climate change, the Framework Convention on Climate Change, the Kyoto Protocol, The Intergovernmental Panel on Climate Change*

Skills development (analysis, synthesis, application):

- *Microeconomic theory of fertility*
- *Graphic analysis of the problem of contamination*

Practical component:

A comparison of countries with respect to their level of development, based on "Country Report 3: International development".

Analysis of the sources and data related to population and resources.

Basic bibliography:

SAMUELSON, P. A. and W. D. NORDHAUS (2010), pages 268-280.

6. Methodology and working plan

In-class teaching is based on theoretical and practical lectures and is complemented by continuous assessment activities (linked to follow-up questions, lectures and

the Country Report) and by tutorials.

Theoretical classes will consist of lectures (an explanation of the content of each lesson by the lecturer).

Practical classes in the widest sense (including group tutorials) will be focused on the achievement of two objectives: on the one hand, the consolidation of the knowledge and skills acquired in the theoretical lectures by means of their application to new cases, and, on the other hand, the development of the capacity for analysis and synthesis of the information related to the content of the subject.

As regards non-group tutorials, preference will be given to those requested in advance. For this reason, and in the interest of guaranteeing this service to students and of making the best use of their time, these tutorials should be reserved in advance (at the beginning or end of classes, by e-mail...)

The following tables show the distribution by time and topic of contact and non-contact activities.

| | | IN-CLASS WORK | | | | | | OUT-OF-CLASS WORK | | |
|---------------|--------------------|-----------------|---------------------------|------------------------------------|------------------------|----------------------------|--------------|-------------------|------------------------|--------------|
| Topics | Total hours | <i>Lectures</i> | <i>Classroom practice</i> | <i>Computer classroom practice</i> | <i>Group tutorials</i> | <i>Assessment sessions</i> | Total | <i>Group work</i> | <i>Autonomous work</i> | Total |
| 1 | 17 | 3 | 3 | | | | 6 | | 11 | 11 |
| 2 | 17 | 3 | 3 | | | | 6 | | 11 | 11 |
| 3 | 17 | 3 | 3 | | | | 6 | | 11 | 11 |
| 4 | 17 | 3 | 3 | | | | 6 | | 11 | 11 |

| | | | | | | | | | | |
|--------------------|------------|-------------|-----------|--|------------|------------|-------------|--|-------------|-------------|
| 5 | 17 | 3 | 3 | | | | 6 | | 11 | 11 |
| 6 | 17 | 3 | 3 | | | | 6 | | 11 | 11 |
| 7 | 17 | 3 | 3 | | | | 6 | | 11 | 11 |
| Other activities | 31 | 2 | | | 4 | 5 | 11 | | 20 | 20 |
| Total hours | 150 | 23 | 21 | | 4 | 5 | 53 | | 97 | 97 |
| (%) | 100 | 15.3 | 14 | | 2.6 | 3.3 | 35.3 | | 64.6 | 64.6 |

| Week | In-class work | Out-of-class work |
|-------------|--|---|
| 1 | Topic 1 theory. Country report and reading material (assignment and fixing dates for corresponding tests) | Study, exercises and applications, reading. Country Report (international trade). |
| 2 | Topic 2 theory. Application: The effects of free trade for the exporting country. | Study, exercises and applications, reading. Country Report (international trade). |
| 3 | Topic 2 theory. Exercises on economic activity measures. | Study, exercises and applications, reading. Country Report (international trade and international business). |
| 4 | Topic 3 theory. A comparison of countries (Country Report 1: International trade). | Study, exercises and applications, reading. Country Report (international trade and international business). |
| 5 | Topic 3 theory. Application: the effects of the international mobility of capital | Study, exercises and applications, reading. Country Report (international business). |
| 6 | Topic 4 theory. A comparison of countries (Country Report 2: International business). | Study, exercises and applications, reading. Country Report (international business). |

| | | |
|----|---|--|
| 7 | Topic 4 theory. Balance of payments exercises. | Study, exercises and applications, reading. Country Report (international development). |
| 8 | Topic 5 theory. Exchange rate exercises. | Study, exercises and applications, reading. Country Report (international development). |
| 9 | Topic 5 theory. Balance of payments and exchange rate exercises. | Study, exercises and applications, reading. Country Report (international development). |
| 10 | Topic 6 theory. Balance of payments and exchange rate exercises. | Study, exercises and applications, reading. Country Report (international development) |
| 11 | Topic 6 theory. Growth and development exercises. | Study, exercises and applications, reading. Country Report (international development). |
| 12 | Topic 7 theory. A comparison of countries (Country Report 3: International Development. | Study, exercises and applications, reading. Country Report (international development). |
| 13 | Topic 7 theory. An analysis of the sources and data on population and resources. | Study, exercises and applications, reading. |
| 14 | General review | Study, exercises and applications, reading |

7. Evaluation of the student's learning results

The evaluation of the subject is based on the written examination, to be held on the day fixed by the school and on continuous assessment activities (the three parts of the *Country Report*, *the reading material* and *the follow-up questions* which take place along the term). The students can not retake the continuous assessment activities in the ordinary or extraordinary exam.

In the case of demonstrable proof of incompatible behaviour with academic honesty rules, none of the marks obtained by any of the people involved will be taken into account for any of the affected course components (both continuous assessment activities and the examination).

The Country Report will deal with the economic characteristics of a country. After the selection of the countries and their assignation (in the first lesson), the student will complete it in three parts ("Country Report 1: International Trade", "Country Report 2: International Business and Country Report 3: International Development"). The maximum mark obtainable via the Country Report is 1.5 points and part of it is related with a final control which date is fixed in the first class.

The Reading Material (set in the first class) will be given a maximum evaluation of 1 point. On the date established in the first class, the summaries must be handed in to the teacher. In this class, and prior to the handing in of the summaries, there will be checks relating to the contents of the reading material, which will consist of answering a series of questions with the summaries of the reading material.

The *follow-up questions* (a minimum of three), considered together, constitute a maximum of 1.5 points and may be asked in at any moment in classes.

The examination will include questions on a) concepts, b) graphic analysis, c) exercises, and d) applications. In all examination periods, the final mark will be made up of the sum of the points obtained in that examination period (which will carry a maximum of six points) and in the continuous assessment activities (with a maximum possible mark equivalent to four points; the mark obtained during the course being carried over in the case of the supplementary exam sessions). It is important to take into account that the subject cannot be passed without a minimum of two points in the exam.

Summary table

| Assessment | Activities and Tests | Weight in final mark (%) |
|--------------------------|---|--------------------------|
| Continuous | <ul style="list-style-type: none"> • Activity 1: Country Report (1,5 points, three check) • Activity 2: Reading (1 point, one check) • Activity 3: Follow-up questions (1,5 points, a minimum of three checks) | 15 |
| | (In case of extraordinary examination, the marks obtained for the continuous assessment kept). | 10 |
| Final examination | <ul style="list-style-type: none"> • 6 points | 15 |
| | (The subject cannot be passed without a minimum of two points in the test) | 60 |

8. Resources, bibliography and complementary documentation

As it has been already detailed in this guide, the basic manuals are the following:

SAMUELSON, P. A. and W. D. NORDHAUS (2010): *Economics*, 19^a ed., McGraw Hill, International edition.

KRUGMAN, P. R. and M. OBSTFELD (2006): *International economics. Theory and policy*, 7^a ed., Pearson (topic 6).

Regarding complementary material, every lecturer will comment on the most relevant sources (further reading, diagrams, notes...) to enable students to follow the course properly, alongside the specific rules governing the progress of the subject.

Subject Guide

1. Information about the subject

| | | | | |
|----------------------------------|---|-------------------------|---|-------------------------------|
| SUBJECT | Introducción a la Macroeconomía/Introductory Macroeconomics | | CODE | GADEMP01-1-007/GECONO01-1-009 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Economics | CENTER | Facultad de Economía y Empresa /School of Economics and Business | |
| TYPE | Formación Básica/Basic | N° TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
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| Álvarez Fernández Manuel José | | mjalvare@unovi.es | | |
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| ROZADO FERNANDEZ MARIA LUZDIVINA | | lrozado@uniovi.es | | |

2. Context

Role of the subject in the Degree

| | | | |
|-------------|-----------------------------|-------------|--|
| NAME | Introductory Macroeconomics | CODE | |
|-------------|-----------------------------|-------------|--|

| | | | |
|------------------------------|---|---------------------------|------------------------------|
| BACHELOR'S DEGREE | Economics | | |
| SCHOOL | Faculty of Economics and Business | | |
| DEPARTAMENT | Economics (http://www.uniovi.es/economia) | | |
| TYPE | Basic Core | Total ECTS credits | 6 |
| PERIOD | Semester 2 | LANGUAGE | English |
| COORDINATOR/S | PHONE /E-MAIL | | ROOM |
| María José Pérez Villadóniga | 985 10 62 41 mjpvilla@uniovi.es | | Office 2 3rd floor, Ala 1 |

Teaching Staff Contact Details

| TEACHING STAFF | PHONE /E-MAIL | ROOM |
|------------------------------|---|---------------------------------|
| María José Pérez Villadóniga | 985106241 mjpvilla@uniovi.es | Office 2, Third floor, Ala 1 |

2. Role of the subject in the Degree and Prerequisites

Microeconomics and macroeconomics are the two fundamental parts into which economic theory is divided. The subject *Introductory Macroeconomics* continues with the analytical perspective of economics initiated in Introductory Microeconomics. This subject forms part of the Economic Analysis module and focuses on the study of economic aggregates (production, employment, prices...). It begins with the identification of the main aggregates and goes on from there to the analysis of the relations between them and the determinants of the aggregates. Special attention is given to the instruments of macroeconomic policy, both fiscal and monetary, and the effects of these policies on the principal macroeconomic variables.

3. Requirements

Prerequisites

Prerequisites for the subject are a high-school level of mathematics (for Spanish students, equivalent to the *Bachillerato de Ciencias Sociales*). The student should be capable of solving systems of equations, calculating derivatives, and representing and interpreting functions.

4. Competencies and learning results

Competencies and Learning Outcomes

The basic objective of the subject is for the student to become familiar with and be able to use the basic tools of macroeconomic analysis and to be able to reason like a macroeconomist..

The general competencies that students should attain are:

- CG1. Capability for analysis and synthesis.
- CG2. Learning capability.
- CG7. Capability for working independently.
- CG10. Critical and self-critical capability.
- CG12. Capability for putting knowledge into practice.
- CG19. Concern for quality and good work.

The specific competencies are:

- CE8: Understand how an economy functions on an aggregate level and assess the impact of changes on how agents behave or on the institutional framework.
- CE9: Understand and assess the role of the public sector in the economy.
- CE10: Understand and assess the international dimension of the economy.
- CE12: Analyse and assess economic policies.
- CE16: Apply and interpret tax regulations.

Having finished the subject, the following learning outcomes should be achieved:

- RA1.7: Identify and understand the main aggregates used to characterize the situation of an economy and understand the interrelations between different sectors and economic agents.
- RA1.8: Understand the importance of monetary flows in economic performance.
- RA1.9: Understand the influence of the foreign sector and international exchange on the main macroeconomic variables.
- RA1.10: Understand the causes of aggregate disequilibrium.
- RA1.11: Know the main instruments of macroeconomic policy available to governments.
- RA1.12: Understand the sources of growth and macroeconomic performance in a dynamic context.

5. Contents

Brief Programme

Topic 1. Macroeconomics: Objectives and instruments

Topic 2. Principal macroeconomic aggregates

Topic 3. The goods market

Topic 4. Financial markets

Topic 5. Determination of income in a closed economy with fixed prices

Topic 6. The IS-LM model in an open economy

Topic 7. Economic policy in an open economy

Basic bibliography

Blanchard, O. (2013), *Macroeconomics: A European Perspective* (2nd edition), Pearson.

Mochón, F. (2009), *Economía, teoría y política* (6ª edición), McGraw-Hill.

Detailed programme

SECTION 1: BASIC MACROECONOMIC CONCEPTS

Topic 1. Macroeconomics: Objectives and instruments

- From microeconomics to macroeconomics

- The objectives of macroeconomics

- The instruments of economic policy

Learning outcomes:

- Know the fundamental issues dealt with in macroeconomics and the methodology of analysis.

Reading material: Blanchard (2013), Chapter 1.

Topic 2. Principal macroeconomic aggregates

- Aggregate output
- Measuring unemployment
- Measuring inflation

Learning outcomes:

- Definition and understanding of the principal economic aggregates.

Reading material: Blanchard (2013), Chapter 2.

SECTION 2: THE ECONOMY IN THE SHORT RUN

Topic 3. The goods market

- The demand for goods: consumption, investment and public expenditure
- The determination of equilibrium production
- Savings and investment

Learning outcomes:

- Develop a basic macroeconomic model with the objective of understanding the relation between the various aggregate variables and how equilibrium employment is determined.

Reading material: Blanchard (2013), Chapter 3.

Topic 4. Financial markets

- The demand for money
- Money, the banking system and the money supply
- Equilibrium in the money market

Learning outcomes:

- Understand what money is and its role in the economy.

Reading material: Blanchard (2013), Chapter 4; Mochón (2009), Chapters 17 and 18.

Topic 5. The determination of income in a closed economy with fixed prices

- The goods market and the IS relation
- The financial markets and the LM relation
- The IS-LM model
- Fiscal policy
- Monetary policy

Learning outcomes:

- Develop a macroeconomic model which simultaneously integrates the goods market and the financial markets
- Know the effects of fiscal and monetary policy in a short run model.

Reading material: Blanchard (2013), Chapter 5.

SECTION 3. THE OPEN ECONOMY

Topic 6. The IS-LM model in an open economy

- Openness in goods markets: exports, imports and the exchange rates
- Openness in financial markets: the balance of payments, interest rates and exchange rates
- The equilibrium in the goods market in an open economy

- The equilibrium in financial markets in an open economy
- Putting goods and financial markets together in an open economy

Learning outcomes:

- Analysis of the effects of introducing the foreign sector into a macroeconomic model.

Reading material: Blanchard (2013), Chapters 6 and 7.

Topic 7. Economic policy in an open economy

- Changes in demand, domestic or foreign
- The effects of fiscal policy in an open economy
- The effects of monetary policy in an open economy
- Economic policy and the exchange rates

Learning outcomes:

- Analysis of the effects of economic policy in an open economy.

Reading material: Blanchard (2013), Chapter 7.

6. Methodology and working plan

Methodology and Teaching Plan

Teaching is organized as follows:

Work requiring attendance

- Lectures. The basic material is presented and discussed and students are given guidance about the contents to be explained in the next lecture.
- Seminars (tutorial classes). Exercises related to the theoretical contents are solved. Issues complementary to the lectures are raised and real-world cases are discussed. The objective of these classes is for students to deepen their understanding of the material and develop their capacity to analyze and apply theoretical models.
- Group tutorial classes. Students doubts and questions are addressed and the exercises which have been proposed as homework are discussed. The monitoring tests will also be discussed. Material which complements the lectures and tutorial classes will be provided.

Work not requiring attendance

- Before the lectures, students should have read the material related to the contents which will be explained. The exercises to be discussed in tutorial classes or group tutorials must be done. Preparation should be made for the final exam.

Teaching plan:

| Week | Work requiring attendance | Work not requiring attendance |
|-------------|---|--------------------------------------|
| 1 | Topic 1. Macroeconomics: Objectives and instruments | Lectures |
| 2 | Topic 2. Principal macroeconomic aggregates | Lectures and problem solving |
| 3 | Topic 3. The goods market | Lectures and problem solving |
| 4 | Topic 3. The goods market | Lectures and problem solving |
| 5 | Topic 3. The goods market | Lectures and problem solving |
| 6 | Topic 4. Financial markets | Lectures and problem solving |
| 7 | Topic 4. Financial markets | Lectures and problem solving |

| | | |
|----|--|------------------------------|
| 8 | Topic 5. Determination of income in a closed economy with fixed prices | Lectures and problem solving |
| 9 | Topic 5. Determination of income in a closed economy with fixed prices | Lectures and problem solving |
| 10 | Topic 6. The IS-LM model in an open economy | Lectures and problem solving |
| 11 | Topic 6. The IS-LM model in an open economy | Lectures and problem solving |
| 12 | Topic 6. The IS-LM model in an open economy | Lectures and problem solving |
| 13 | Topic 7. Economic policy in an open economy | Lectures and problem solving |
| 14 | Topic 7. Economic policy in an open economy | Lectures and problem solving |

7. Evaluation of the student's learning results

Assessment

The evaluation of the subject consists of two parts: continuous assessment and final exam.

- *Continuous assessment.* This will consist of four monitoring tests in which students will be examined on the contents covered up to the date of the test. In each test, students can obtain a maximum of 1 point. A further 1 point can be achieved on the basis of criteria established by the lecturer (exercises, participation in class, etc.).
- *Final exam.* This will cover theoretical questions and concrete problems. A maximum of 6 points can be obtained.

The *final grade* in the subject will be the sum of the points obtained in continuous assessment and the final exam, where continuous evaluation accounts for 40% of the final grade and the final exam 60%.

In extraordinary examinations, the points obtained from continuous assessment will be maintained. The monitoring tests cannot be repeated.

Summary Table

| Assessment | Activities | Weight in final grade (%) |
|------------|--|---------------------------|
| Continuous | <ul style="list-style-type: none"> • Monitoring test 1 (Topics 1, 2 and 3) • Monitoring test 2 (Topics 4 and 5) • Monitoring test 3 (Topics 6 and 7) • Class participation | 40% |
| Final Exam | | 60% |

8. Resources, bibliography and complementary documentation

Resources, Bibliography and Additional Information

Basic bibliography

Blanchard, O., Amighini, A. and Giavazzi, F. (2013), *Macroeconomics. A European Perspective* (2nd edition), Pearson.

Mochón, F. (2009), *Economía, teoría y política* (6ª edición), McGraw-Hill.

Complementary bibliography

Sloman, J and Wride, A. (2009), *Economics* (7th edition), Pearson.

Belzunegui, B., Cabrerizo, J., Padilla, R. y Valero, I. (2013), *Macroeconomía: Problemas y ejercicios resueltos* (3ª ed.), Pearson.

Mochón, A. y De Juan, R. (2006), *Principios de Economía. Libro de problemas* (3ª ed.), McGraw-Hill.

Subject Guide

1. Information about the subject

| | | | | |
|-----------------------------------|---|-------------------------|--|--|
| SUBJECT | Introducción a la Microeconomía/Introductory Microeconomics | | CODE | GADEMP01-1-008/GECONFI01-1-007 GCONFI01-1-007 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Economics Degree in Accounting and Finance | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Formación Básica | N° TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
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| PRIETO RODRIGUEZ JUAN | | juanprieto@uniovi.es | | |

2. Context

Microeconomics and macroeconomics are the two fundamental parts into which economic theory is divided. The subject *Introductory Microeconomics* represents students' first contact with the fundamentals of theoretical economic analysis and forms part of the Economic Analysis module.

The subject confronts students with the basic objective of economic analysis, namely the allocation of scarce resources. After introducing this problem we develop the basic theory of the market in its role as the fundamental institution for allocating resources. We then analyze the efficiency of competitive markets and these are compared to other market structures.

3. Requirements

Prerequisites for the subject are a high-school level of mathematics (for Spanish students, equivalent to the *Bachillerato de Ciencias Sociales*). The student should be capable of solving systems of equations, calculating derivatives, and representing and interpreting functions.

4. Competencies and learning results

The basic objective of the subject is for the student to become familiar with and be able to use the basic tools of economic analysis and to be able to think like an economist.

General competencies:

The general competencies that students in the Degree in Economics and the Degree in Business Administration should attain are:

- Capability for analysis and synthesis.
- Learning capability.
- Capability for working independently.
- Critical and self-critical capability.
- Capability for putting knowledge into practice.
- Concern for quality and good work.

In the Degree in Accounting and Finance, the general competencies that students should attain are:

- Capability for analysis and synthesis.
- Organisation and planning capability.
- Skill for finding, analysing and interpreting information from different sources.
- Problem-solving capability.
- Decision-making capability.
- Capability for teamwork.
- Capability for working in an international context.
- Critical and self-critical capability.

- Capability for independent learning.
- Adaptability.
- Leadership capability.
- Creativity.
- Initiative and enterprise.
- Capability for putting knowledge into practice.

Specific competencies:

The specific competencies aimed at in the Degree in Economics are:

- Identify and apply appropriate quantitative tools for the analysis of economic information.
- Propose, analyse and resolve mathematical models in the economic and business area.
- Understand the institutional environment and its impact on economic activity.
- Understand how economic agents behave and assess their influence on market structure and functioning.
- Understand and assess the role of the public sector in the economy.
- Understand and assess the way economic agents inter-relate.

The specific competencies aimed at in the Degree in Business Administration are:

- Understand the basic mechanisms for the functioning and structure of markets.
- Understand the economic-institutional environment and its impact on business decisions.

The specific competencies aimed at in the Degree in Accounting and Finance are:

- Develop skills and knowledge of financial management.
- Know techniques for determining company costs.
- Issue reports on the company situation.
- Understand the mechanisms for market functioning.
- Know the economic environment of the business activity.
- Apply quantitative techniques to the analysis of financial information.
- Know historical aspects of economic activity.

Having finished the subject, the following learning outcomes should be achieved:

- Understand the central problem of the scarcity and allocation of resources.
- Know the role of competitive markets as a means to allocating resources.
- Know the theoretical foundations of firm behaviour when taking profit-maximization decisions.
- Understand the workings of different market structures and their consequences for economic efficiency.

5. Contents

Brief Programme

Topic 1: Economics: concept, method and tools.

Topic 2: Basic concepts of the market: supply and demand.

Topic 3: Consumer behavior.

Topic 4: The firm: production.

Topic 5: The firm: costs of production.

Topic 6: Perfect competition.

Basic bibliography

Main texts

Mankiw, N.G. (2011), *Principles of Economics* (6th Edition). South Western Publishing Co.

Pindyck, R.S. and Rubinfeld, D.L. Frank, R. (2013), *Microeconomics* (8th International Edition). Pearson International Edition.

Complementary texts

Colander, D.C. (2010), *Microeconomics* (8th edition). McGraw-Hill.

Frank, R. (2010), *Microeconomics and Behavior* (8th edition). McGraw-Hill.

Detailed programme

Topic1: Economics: concept, method and tools

1.1. The concept of economics.

1.2. Economics as a science.

1.3. Fundamental problems in economics: choice and opportunity cost.

Learning objectives:

- Become familiar with and understand the basic aspects of the economic problems facing society, as well as the importance of the concept of opportunity cost.
- Become familiar with the language of economics and that of mathematics applied to economic science.

Reading material:

- Pindyck and Rubinfeld (2013), Chapter 1.
- Mankiw (2011), Chapters 1 and 2.
- Frank (2010), Chapter 1.
- Colander (2010), Chapters 1, 2 and 6.

Topic 2: Basic concepts of the market: supply and demand

2.1. The supply function.

2.2. The demand function.

2.3. Market equilibrium.

2.4. Elasticity.

Learning objectives:

- Understand the concept of the market.
- Ability to use demand and supply functions to understand how markets work and how prices are formed.
- Understand how variables are related to each other using the concept of elasticity.

Reading material:

- Pindyck and Rubinfeld (2013), Chapter 2 (sections 2.1-2.7).
- Mankiw (2011), Chapters 4 and 5.
- Frank (2010), Chapter 2.
- Colander (2010), Chapter 4.

Topic 3: Consumer behaviour

3.1. Consumer behavior: preferences and restrictions.

3.2. Individual and market demand.

3.3. Consumer surplus.

Learning objectives:

- Understand the basic concepts of consumer theory.
- Understand the principles of rational choice.
- Understand how changes in prices and income affect consumer choice.

Reading material:

- Pindyck and Rubinfeld (2013), Chapter 3 (sections 3.1, 3.2, 3.3 and 3.5) and Chapter 4 (sections 4.1, 4.3 and 4.4)
- Mankiw (2011), Chapter 21.
- Frank (2010), Chapters 3, 4 and 5.
- Colander (2010), Chapter 10.

Topic 4: The firm: production

4.1. The production technology.

4.2. Production in the short run: Average product and marginal product.

4.3. Production in the long run: Returns to scale.

Learning objectives:

- Understand the concept of the production function of the firm and the difference between short run and long run.
- Understand how the production technology restricts and conditions firm behavior in the short run (Law of Diminishing Marginal Returns) and long run (Returns to Scale).

Reading material:

- Pindyck and Rubinfeld (2013), Chapter 6.
- Mankiw (2011), Chapters 13 and 18.
- Frank (2010), Chapter 9.
- Colander (2010), Chapters 12 and 13.

Topic 5: The firm: The costs of production

5.1. Economic costs and accounting costs.

5.2. Determinants of short-run costs.

5.3. Costs in the long run: Economies of scale.

Learning objectives:

- Understand how the prices of factors of production represent a new restriction for the firm and how the combination of technology and input prices determines firm production costs.
- Understand how firms choose their inputs to minimize their costs.

Reading material:

- Pindyck and Rubinfeld (2013), Chapter 7 (sections 7.1-7.4).
- Mankiw (2011), Chapter 13.
- Frank (2010), Chapter 10.
- Colander (2010), Chapters 12 and 13.

Topic 6: Perfect competition

6.1. Perfectly competitive markets: Characteristics.

6.2. Profit maximization by a competitive firm: Short-run supply curve.

6.3. Analysis of competitive markets.

6.4. Perfect competition vs. other market structures.

Learning objectives:

- Know the characteristics of a competitive market.
- Determine the level of production which maximizes firm profits and derive the firm's supply curve and the market supply curve.
- Understand the advantages of perfect competition in terms of resource allocation.

Reading material:

- Pindyck and Rubinfeld (2009), Chapters 8 (sections 8.1-8.6) and 9.
- Mankiw (2011), Chapter 14.
- Frank (2010), Chapter 11.
- Colander (2010), Chapter 14.

6. Methodology and working plan

The teaching methodology includes:

Work requiring attendance

- Lectures. The basic material is presented and discussed and students are given guidance about the contents to be explained in the next lecture.
- Seminars (tutorial classes). Exercises related to the theoretical contents are solved. Issues complementary to the lectures are raised and real-world cases are discussed. The objective of these classes is for students to deepen their understanding of the material and develop their capacity to analyze and apply theoretical models.
- Group tutorial classes. Students doubts and questions are addressed and the exercises which have been proposed as homework are discussed. The monitoring tests will also be discussed. Material which complements the lectures and tutorial classes will be provided.

Work not requiring attendance

- Before the lectures, students should have read the material related to the contents which will be explained. The exercises to be discussed in tutorial classes or group tutorials must be done. Preparation should be made for the final exam.

Teaching plan:

| Week | Work requiring attendance | Work not requiring attendance |
|-------------|--|--------------------------------------|
| | | |
| 1 | Topic 1: Economics: concept, method and tools | Lectures. |
| 2 | Topic 2: Basic concepts of the market: supply and demand | Lectures and problem solving |
| 3 | Topic 2: Basic concepts of the market: supply and demand | Lectures and problem solving |
| 4 | Topic 2: Basic concepts of the market: supply and demand | Lectures and problem solving |
| 5 | Topic 3: Consumer behavior | Lectures and problem solving |
| 6 | Topic 3: Consumer behavior | Lectures and problem solving |
| 7 | Topic 4: The firm: production | Lectures and problem solving |
| 8 | Topic 4: The firm: production | Lectures and problem solving |
| 9 | Topic 5: The firm: costs of production | Lectures and problem solving |
| 10 | Topic 5: The firm: costs of production | Lectures and problem solving |

| | | |
|----|--|------------------------------|
| 11 | Topic 5: The firm: costs of production | Lectures and problem solving |
| 12 | Topic 6: Perfect competition | Lectures and problem solving |
| 13 | Topic 6: Perfect competition | Lectures and problem solving |
| 14 | Topic 6: Perfect competition | Lectures and problem solving |

7. Evaluation of the student's learning results

The evaluation of the subject consists of two parts: continuous assessment and final exam. Continuous assessment is important as the programme develops from very basic concepts which comprise the necessary tools for understanding and assimilating later concepts. In this sense, the process of learning economic theory is similar to that of constructing a building, where first the foundations have to be laid and then the building is constructed on these foundations. Continuous assessment tries to gauge whether the student has assimilated the basic concepts needed to understand the concepts which follow. As such, continuous assessment only makes sense during the teaching period. The continuous assessment and the final exam comprise the following:

- *Continuous assessment.* This will consist of three monitoring tests in which students will be examined on the contents covered up to the date of the test. As the objective of these tests is to determine the degree of assimilation of concepts and acquisition of competencies as they are explained in theoretical and practical classes, these tests cannot be repeated. In each test, students can obtain a maximum of 1 point. A further 1 point can be achieved on the basis of exercises and participation in class.
- *Final exam.* This will cover theoretical questions and concrete problems. A maximum of 6 points can be obtained.

The final grade in the subject will be the sum of the points obtained in continuous assessment and the final exam.

In extraordinary examinations, the points obtained from continuous assessment will be maintained.

For **part-time students**, the evaluation of the subject will consist of single, final exam worth 10 points, in each of the official exam periods.

Summary Table

| Assessment | Activities and tests | Weight in final grade (%) |
|-------------------|-----------------------------|----------------------------------|
| Continuous | Monitoring test | 10% |
| | Monitoring test | 10% |
| | Monitoring test | 10% |
| | Participation in class | 10% |
| Final Exam | | 60% |

8. Resources, bibliography and complementary documentation**Basic Bibliography**

Mankiw, N.G. (2011), *Principles of Economics* (6th Edition). South Western Publishing Co.

Pindyck, R.S. and Rubinfeld, D.L. Frank, R. (2013), *Microeconomics* (8th International Edition). Pearson International Edition.

Complementary Bibliography

Colander, D.C. (2010), *Microeconomics* (8th edition). McGraw-Hill.

Frank, R. (2010), *Microeconomics and Behavior* (8th edition), McGraw-Hill.

Sloman, J. and Wride, A. (2009), *Economics* (7th edition), Prentice Hall.

In Spanish:

Blanco, J.M. (2008), *Economía. Teoría y práctica*(5ª edición), McGraw-Hill.

Mochón, F. (2009), *Economía, teoría y política* (6ª edición), McGraw-Hill.

Subject Guide

1. Information about the subject

| | | | | |
|-----------------------------------|---|-------------------------|--|--|
| SUBJECT | Introducción a la Contabilidad/Introduction to Accounting | | CODE | GADEMP01-1-009/GECONO01-1-002 GCONFI01-1-002/GRLYRH01-1-007 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Economics Degree in Accounting and Finance Degree in Labour Relations and Human Resources | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Formación Básica/Basic | N° TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
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2. Context

BACHELOR´S DEGREE IN MANAGEMENT AND BUSINESS ADMINISTRATION

According to the Bachelor´s Degree in Management and Business Administration study plan, *Introduction to Accounting* is classified into the module of Accounting and deals with the subject of Financial Accounting. As students have no previous exposure to accounting and financial statements, the course will equip them with basic skills and knowledge of the key concepts of accounting that will be very useful not only in subsequent accounting related courses, but also in order to earn their Bachelor´s Degree and succeed in the professional environment for which they are training.

The course is concerned with Financial Accounting which provides information designed to satisfy the needs of users outside the reporting company, enabling students to understand the accounting principles and procedures underlying a company´s financial statements. This involves preparing and interpreting business accounting information as well as becoming familiar with the Spanish Generally Accepted Accounting Principles (GAAP).

All in all, it is an introductory course which combines theoretical and practical aspects, where students will:

- Learn the key concepts of accounting.
- Understand the need for generally accepted accounting principles.
- Receive a firm grounding in the accounting principles and procedures underlying the company´s financial statements that will prepare them to carry out the bookkeeping process and transaction analysis.
- Develop skills to complete the accounting cycle.
- Be equipped with the knowledge necessary to prepare and present financial statements.

BACHELOR´S DEGREE IN ACCOUNTING AND FINANCE

According to the Bachelor´s Degree in Accounting and Finance study plan, *Introduction to Accounting* is classified into the module of Accounting and deals with the subject of Financial Accounting. As students have no previous exposure to accounting and financial statements, the course will equip them with basic skills and knowledge of the key concepts of accounting that will be very useful not only in subsequent accounting related courses, but also in order to earn their Bachelor´s Degree and succeed in the professional environment for which they are training.

The course is concerned with Financial Accounting which provides information designed to satisfy the needs of users outside the reporting company, enabling students

to understand the accounting principles and procedures underlying a company's financial statements. This involves preparing and interpreting business accounting information as well as becoming familiar with the Spanish Generally Accepted Accounting Principles (GAAP), thus allowing students to understand how the accounting system provides reliable and relevant information required both by company managers and external users in order to make informed business decisions.

All in all, it is an introductory course which combines theoretical and practical aspects, where students will:

- Learn the key concepts of accounting.
- Understand the need for generally accepted accounting principles.
- Receive a firm grounding in the accounting principles and procedures underlying the company's financial statements that will prepare them to carry out the bookkeeping process and transaction analysis.
- Develop skills to complete the accounting cycle.
- Be equipped with the knowledge necessary to prepare and present financial statements.

Obviously, it is essential that students gain a sound grounding in accounting basics, as *Introduction to Accounting* will lay the foundations on which students specializing in Accounting and Finance must build in subsequent courses with a view to successfully completing their degree.

BACHELOR'S DEGREE IN ECONOMICS

According to the Bachelor's Degree in Economics study plan, *Introduction to Accounting* is classified into the module of Business Organization and deals with the subject of Accounting.

The course is concerned with Financial Accounting which provides information designed to satisfy the needs of users outside the reporting company, enabling students to understand the accounting principles and procedures underlying a company's financial statements. This involves preparing and interpreting business accounting information as well as becoming familiar with the Spanish Generally Accepted Accounting Principles (GAAP). As students have no previous exposure to accounting and financial statements, the course will equip them with basic skills and knowledge of the key concepts of accounting that will be very useful not only in subsequent accounting related courses, but also in order to earn their Bachelor's Degree and succeed in the professional environment for which they are training.

All in all, it is an introductory course which combines theoretical and practical aspects, where students will:

- Learn the key concepts of accounting.
- Understand the need for generally accepted accounting principles.
- Receive a firm grounding in the accounting principles and procedures underlying the company's financial statements that will prepare them to carry out the bookkeeping process and transaction analysis.
- Develop skills to complete the accounting cycle.
- Be equipped with the knowledge necessary to prepare and present financial statements.

BACHELOR´S DEGREE IN LABOUR RELATIONS AND HUMAN RESOURCES

According to the Bachelor´s Degree in Labour Relations and Human Resources study plan, *Introduction to Accounting* is classified into the topic of Work Organization and Human Resource Management.

As students have no previous exposure to accounting and financial statements, the course will equip them with basic skills and knowledge of the key concepts of accounting that will be very useful not only in subsequent accounting related courses, but also in order to earn their Bachelor´s Degree and succeed in the professional environment for which they are training.

The course is concerned with Financial Accounting which provides information designed to satisfy the needs of users outside the reporting company, enabling students to understand the accounting principles and procedures underlying a company´s financial statements. This involves preparing and interpreting business accounting information as well as becoming familiar with the Spanish Generally Accepted Accounting Principles (GAAP).

All in all, it is an introductory course which combines theoretical and practical aspects, where students will:

- Learn the key concepts of accounting.
- Understand the need for generally accepted accounting principles.
- Receive a firm grounding in the accounting principles and procedures underlying the company´s financial statements that will prepare them to carry out the bookkeeping process and transaction analysis.
- Develop skills to complete the accounting cycle.
- Be equipped with the knowledge necessary to prepare and present financial statements.

3. Requirements

The course requires no previous knowledge.

4. Competencies and learning results

BACHELOR´S DEGREE IN MANAGEMENT AND BUSINESS ADMINISTRATION

The general competencies which students will develop by taking *Introduction to Accounting* include:

- Capability for analysis and synthesis.
- Learning capability.
- Capability for fluent oral and written communication in mother tongue.
- Knowledge and understanding of other languages, mainly English.

- Skill at searching for and analyzing information in the working environment.
- Capability for using ICT tools.
- Capability for working independently.
- Capability for teamwork.
- Capability for working in an international context.
- Critical and self-critical capability.
- Decision-making capability.
- Capability for putting knowledge into practice.
- Creativity for finding new ideas and solutions.
- Organization and planning capability.
- Adaptability.
- Concern for quality and good work.
- Values and ethics.
- Integration of democratic values and of the culture of peace in the working environment.
- Integration of the principles of equal treatment and opportunities for men and women in the working environment.
- Integration of the principles of equal opportunities and universal access for the disabled in the working environment.

Students will also develop the following specific competencies on the course:

- Apply and interpret national and international accounting regulations.
- Draw up and analyze internal and external accounting information for management control and decision-making.
- Transmit information, ideas, problems and solutions in the area of business management to a specialist or non-specialist audience.
- Issue advisory reports on specific company and market situations.

As far as learning outcomes are concerned, the knowledge and skills that students will possess upon successful completion of the course will enable them to:

- Understand the accounting principles and procedures underlying the company's financial statements at a basic level and apply them in the bookkeeping process and transaction analysis.
- Complete the accounting cycle, determining accounting profit and producing the annual financial statements.
- Promote ethical behavior in accounting and ensure standards of professional conduct.
- Interpret company annual accounts.
- Interpret business financial statements to evaluate the financial position of real companies, the success of their operations, and gain an insight into their future performance.
- Identify, record and report relevant economic and financial data to allow informed business decision making.

BACHELOR'S DEGREE IN ACCOUNTING AND FINANCE

The general competencies which students will develop by taking *Introduction to Accounting* include:

- Capability for analysis and synthesis.
- Organization and planning capability.
- Capability for oral and written communication in the mother tongue.
- Capability for oral and written communication in a foreign language.
- Capability for using IT tools relating to the area of study.
- Skill for finding, analyzing and interpreting information from different sources.
- Problem-solving capability.
- Decision-making capability.
- Capability for teamwork.
- Capability for working in an international context.
- Capability for working in diverse and multi-cultural environments.
- Critical and self-critical capability.
- Ethical commitment at work and motivation to achieve quality.
- Capability for independent learning.
- Adaptability.
- Leadership capability.
- Initiative and enterprise.
- Concern for environmental and social aspects, equal treatment and respect for democratic values.
- Capability for putting knowledge into practice.

Students will also develop the following specific competencies on the course:

- Understand the mechanisms involved in the processing of business information.
- Apply and interpret accounting regulations.
- Provide advisory services on accounts and taxation.
- Analyse and interpret the company's financial statements.
- Draw up accounting information for decision-making.
- Apply mercantile regulations in the drafting of accounts.
- Know the economic environment of the business activity.

As far as learning outcomes are concerned, the knowledge and skills that students will possess upon successful completion of the course will enable them to:

- Understand the accounting principles and procedures underlying the company's financial statements at a basic level and apply them in the bookkeeping process and transaction analysis.
- Complete the accounting cycle, determining accounting profit and producing the annual financial statements.
- Promote ethical behavior in accounting and ensure standards of professional conduct.
- Interpret company annual accounts.
- Interpret business financial statements to evaluate the financial position of real companies, the success of their operations, and gain an insight into their future performance.

BACHELOR'S DEGREE IN ECONOMICS

The general competencies which students will develop by taking *Introduction to Accounting* include:

- Capability for analysis and synthesis.
- Learning capability.
- Capability for fluent oral and written communication in mother tongue.
- Knowledge and understanding of other languages, mainly English.
- Skill at searching for and analyzing information in the working environment.
- Capability for using ICT tools.
- Capability for working independently.
- Capability for teamwork.
- Capability for working in an international context.
- Critical and self-critical capability.
- Decision-making capability.
- Capability for putting knowledge into practice.
- Creativity for finding new ideas and solutions.
- Organization and planning capability.
- Adaptability.
- Concern for quality and good work.
- Values and ethics.
- Integration of democratic values and of the culture of peace in the working environment.
- Integration of the principles of equal treatment and opportunities for men and women in the working environment.
- Integration of the principles of equal opportunities and universal access for the disabled in the working environment.

Students will also develop the following specific competencies on the course:

- Analyze and interpret accounting information for decision-making.

As far as learning outcomes are concerned, the knowledge and skills that students will possess upon successful completion of the course will enable them to:

- Understand the accounting principles and procedures underlying the company's financial statements at a basic level and apply them in the bookkeeping process and transaction analysis.
- Complete the accounting cycle, determining accounting profit and producing the annual financial statements.
- Promote ethical behavior in accounting and ensure standards of professional conduct.
- Interpret company annual accounts.
- Interpret business financial statements to evaluate the financial position of real companies, the success of their operations, and gain an insight into their future performance.
- Identify, record and report relevant economic and financial data to allow informed business decision making.

BACHELOR´S DEGREE IN LABOUR RELATIONS AND HUMAN RESOURCES

The general competencies which students will develop by taking *Introduction to Accounting* include:

- Oral and written communication in the mother tongue.
- Independent learning.

Students will also develop the following specific competencies on the course:

- Apply knowledge on business organization and management.
- Apply knowledge of social and labour auditing.
- Capability for communicating in writing and orally using the appropriate terminology of labour relations and human resources.
- Capability for applying ICTs in different areas of labour relations and human resources.
- Capability for applying different techniques for socio-labour evaluation and audits.
- Put knowledge on labour relations and human resources into practice.

As far as learning outcomes are concerned, the knowledge and skills that students will possess upon successful completion of the course will enable them to:

- Understand the accounting principles and procedures underlying the company´s financial statements at a basic level and apply them in the bookkeeping process and transaction analysis.
- Complete the accounting cycle, determining accounting profit and producing the annual financial statements.
- Promote ethical behavior in accounting and ensure standards of professional conduct.
- Interpret company annual accounts.

5. Contents

Following is the abbreviated programme of the course *Introduction to Accounting*:

Abbveiated programme

Lesson 1.- Definition and branches of Accounting

Lesson 2.- Corporate net worth

Lesson 3.- The bookkeeping process

Lesson 4.- Generally Accepted Accounting Principles (GAAP)

Lesson 5.- The accounting cycle

Lesson 6.- Assets

Lesson 7.- Shareholders' equity and liabilities

Lesson 8.- The determination of accounting profit

Lesson 9.- Annual accounts

The detailed programme of the course, along with the specific objectives of each lesson are listed below:

Detailed programme and lesson objectives

Lesson 1.- Definition and branches of Accounting

- 1.1. The need for economic information
- 1.2. Definition of Accounting
- 1.3. Branches of Accounting

Overall objective of the lesson:

Justify the need for accounting information and define the subject studied in the course.

Specific learning objectives:

- Identify Accounting as an information system.
- Emphasize the importance of Accounting in making informed business decisions.

- Distinguish the different branches of Accounting and understand the objectives and functions of Financial Accounting.

Lesson 2.- Corporate net worth

- 2.1. Business activities
- 2.2. Corporate assets and corporate sources of financing
- 2.3. Categories of assets, liabilities and shareholders' equity
- 2.4. Order of presentation in the financial statements

Overall objective of the lesson:

Study corporate net worth and its major components.

Specific learning objectives:

- Provide an overview of business activities.
- Identify corporate assets and corporate sources of financing.
- Enumerate the elements which make up corporate assets and corporate sources of financing.
- Clearly distinguish the different classes or categories of assets, liabilities and shareholders' equity and learn to organize and classify elements into them.
- Understand the accounting equation and analyze how business transactions will affect the accounting equation.

Lesson 3.- The bookkeeping process

- 3.1. The accounting method
- 3.2. Accounts as an instrument of representation and measurement
- 3.3. Classifications of accounts
- 3.4. Recording of business transactions

Overall objective of the lesson:

Study both the tools and techniques used in Accounting in order to represent economic reality and its regulatory framework.

Specific learning objectives:

- Explain the accounting method.
- Define accounts and distinguish asset, liability and shareholders' equity accounts, knowing the debit and credit rules which apply to each type of account.
- Distinguish between balance sheet accounts and income statement accounts.
- Identify the major books of account and their functions, particularly the General Journal and the General Ledger.
- Apply double-entry accounting, analyzing, journalizing and posting business transactions.

Lesson 4.- Generally Accepted Accounting Principles (GAAP)

- 4.1. Harmonization of international accounting standards
- 4.2. Structure of the Spanish General Accounting Plan
- 4.3. Accounting principles

Overall objective of the lesson:

Introduce the basic Spanish accounting standards: the General Accounting Plan.

Specific learning objectives:

- Justify the need for accounting standards.
- Distinguish the various parts of the Spanish General Accounting Plan and their content.
- Identify and apply the accounting principles established by the General Accounting Plan to specific business transactions.

Lesson 5.- The accounting cycle

- 5.1. The opening phase
- 5.2. The recording phase
- 5.3. The closing and summarizing phase

Overall objective of the lesson:

Analyze the various phases which make up the accounting cycle.

Specific learning objectives:

- Understand the different phases the accounting cycle consists of.
- Enumerate the sequence of accounting procedures to be completed during each accounting period.
- Identify the closing process which leads to the determination of accounting profit and the preparation of financial statements.

Lesson 6.- Assets

- 6.1. Classification of assets
- 6.2. Inventories
- 6.3. Financial assets
- 6.4. Tangible and intangible fixed assets

Overall objective of the lesson:

Provide an overview of the major categories of assets.

Specific learning objectives:

- Classify assets into major categories.
- Identify the items which comprise inventories and introduce the accounting treatment for inventories.
- Identify the items financial assets encompass and introduce the accounting treatment for financial assets.
- Identify the various items of tangible and intangible fixed assets and introduce the accounting treatment for such investments.

Lesson 7.- Shareholders' equity and liabilities

- 7.1. Shareholders' equity
- 7.2. Liabilities

Overall objective of the lesson:

Provide an overview of the primary sources of corporate funding, distinguishing between financing obtained from creditors and owners of the company.

Specific learning objectives:

- Classify the sources of corporate financing into major categories.
- Identify the key components of shareholders' equity and introduce the accounting treatment for equity.
- Identify the sources of financing classified as liabilities and introduce the accounting treatment for liabilities.

Lesson 8.- The determination of accounting profit

8.1. Income and expenses

8.2. The end-of-period adjusting process

Overall objective of the lesson:

Analyze the process of calculating accounting profit.

Specific learning objectives:

- Identify business income and expenses.
- Analyze the end-of-period adjusting process.
- Determine accounting earnings.

Lesson 9.- Annual accounts

9.1. Preparation of annual accounts

9.2. Interpreting annual accounts

Overall objective of the lesson:

Study the preparation of annual accounts and introduce the interpretation of the information contained in financial statements.

Specific learning objectives:

- Outline the financial reporting process which involves preparing, auditing, approving, filing and publishing annual financial statements.
- Identify the annual accounts and describe the documents which make up a set of accounts.
- Analyze the content of the annual accounts as a basis for making informed business decisions.

6. Methodology and working plan

The teaching-learning methodology used in the course *Introduction to Accounting* is based on a combination of face-to-face and non-contact activities, in both cases encouraging active student participation by means of the introduction of elements of dialogue and argument during the classes, with a view to assessing their understanding and monitoring on the topics explained.

In this discipline theory and practice are perfectly integrated, so any teaching method for accounting must necessarily have a strong practical orientation on a sound theoretical basis, where the student tries to face and confront economic reality by applying theoretical knowledge. Accordingly, in-class practical activities are set up which involve the participative discussion and resolution of exercises wherein students take an active role, consolidating previously acquired knowledge and identifying gaps and doubts that may arise upon its implementation.

The basic material used in the development of this course includes the relevant laws and regulations, a course theory manual and the practice exercises booklet prepared by the faculty members teaching the course, supplemented with other material prepared by teachers. In order to support teaching, students are provided with other resources which complement both the theoretical and practical aspects of the subject and include references to useful books as well as national and international websites from which they may obtain relevant and updated information. In addition to the material listed above, teachers will make other useful study material available to students through the Virtual Campus.

As described below, the proposed methodology of the course is constituted by the following activities:

- **Work requiring attendance: 53 hours**

– *Lectures.* Lectures are delivered to the whole class at the same time and seek to present the key concepts and theoretical aspects of the subject, which are illustrated with numerous examples. The course will foster active participation and student engagement as an enhancement of lectures. The development of lectures is based on the course material which will be available to students in advance of lectures, so that they can prepare lessons before they are delivered in class.

– *In-class practical sessions.* Each class group is divided into two subgroups for the purpose of conducting in-practical sessions. In-class practical activities involve discussing and solving practice exercises which will help students consolidate their understanding of the subject and develop their capability for analysis by applying previously acquired theoretical knowledge. Active-learning techniques will be used aimed at encouraging student participation and interpersonal interaction among students as well as between the teacher and students.

– *Group tutorials.* Each class group is divided into three subgroups for the purpose of conducting group tutorials. These consist of an Instructional activity conducted by a faculty member in order to review and discuss the material and topics presented in class, both individually and in groups.

– *Evaluation session.* Written exam consisting of theoretical questions and practice exercises to assess student progress.

- **Work not requiring attendance: 97 hours**

– *Individual work*. It consists of the following activities: reading the lecture notes in advance of class and the subsequent study of these once they have been dealt with in the lectures; doing the practice exercises at home before in-class practical sessions and the subsequent study of these once solutions have been given and discussed in class; completing homework assignments and carrying out, where appropriate, any other out-of-class activities; and preparing for the final exam.

The following is a summary of hours for each activity:

| INTRODUCTION TO ACCOUNTING | Activity | Hours | Hours (%) |
|--------------------------------------|-----------------------------|--------------|------------------|
| Work requiring attendance | Lectures | 28 | 53 (35.33%) |
| | In-class practical sessions | 21 | |
| | Group tutorials | 4 | |
| Work not requiring attendance | Individual work | 97 | 97 (64.67%) |
| TOTAL | | 150 | 150 (100%) |

Only for illustrative purposesa summary table of the hours of the various activities allocated by lessons is presented below:

| Lessons | Total hours | <i>Lectures</i> | <i>In-class Practical Sessions</i> | <i>Group Tutorials</i> | Total work requiring attendance | <i>Individual Work</i> | Total work not requiring attendance |
|----------------|--------------------|-----------------|------------------------------------|------------------------|--|------------------------|--|
| Lesson 1 | 3 | 1 | - | | 1 | 2 | 2 |
| Lesson 2 | 10.5 | 2 | 1.5 | | 3.5 | 7 | 7 |
| Lesson 3 | 22.5 | 3 | 4.5 | | 7.5 | 15 | 15 |

| | | | | | | | |
|--------------------|-------------|--------------|-----------|-------------|--------------|--------------|--------------|
| Lesson 4 | 12.5 | 2.5 | 1.5 | | 4 | 8.5 | 8.5 |
| Lesson 5 | 13.5 | 1.5 | 3 | | 4.5 | 9 | 9 |
| Lesson 6 | 28.5 | 5 | 4.5 | | 9.5 | 19 | 19 |
| Lesson 7 | 13 | 2 | 2 | | 4 | 9 | 9 |
| Lesson 8 | 18 | 3 | 3 | | 6 | 12 | 12 |
| Lesson 9 | 13.5 | 2 | 1 | | 3 | 10.5 | 10.5 |
| All the lessons | 9 | | | 4 | 4 | 5 | 5 |
| Evaluation | 6 | 6 | | | 6 | | |
| Total hours | 150 | 28 | 21 | 4 | 53 | 97 | 97 |
| (%) | 100 | 18.67 | 14 | 2.66 | 35.33 | 64.67 | 64.67 |

7. Evaluation of the student's learning results

The following methods will be used to assess student performance:

1.- Continuous assessment. It involves analyzing the various stages the student will pass through during the learning process so as to assess student progress throughout the course and then produce a final evaluation result from these periodic assessments. This method of assessment is based on active engagement of students in in-class activities, objective follow-up tests and theoretical and practical quizzes, solving cases, exercises and practical activities, writing reviews about readings and other material, as well as individual and group presentations. The purpose of continuous assessment is to assess the level of knowledge and learning outcomes achieved by students at each point in time. Since the content of this course is cumulative, students must demonstrate during the course that they understand and assimilate the subject by accomplishing certain goals and learning outcomes when these are required and due. Therefore, continuous assessment tests and activities shall not be repeatable nor reassessable, that is to say, continuous assessment does not allow for evaluation after the course due dates have passed.

2.- Final exam. It is the overall assessment made at the end of the learning process, which quantifies and evaluates student performance through a grade. Its primary

purpose will be to measure the level of student achievement at the end of the course.

Grading system

*The final grade, in the May and June 2016 examinations, will be a weighted average of scores from the continuous assessment and the final exam with a weighting of 40% for the continuous assessment and 60% for the final exam. **Continuous assessment tests and activities shall not be repeated nor reassessed**, and the results of the continuous assessment carried out during the course will not be modified, and will be taken into account to determine the final grade for each one of the above mentioned examinations.*

Nonetheless, the continuous assessment mark expires at the end of each academic year. Therefore, the final exam scheduled for January 2016 will be worth 10 points and account for 100% of the final grade.

Summary Table 1

| Examinations | Grading system | Weight in final grade (%) |
|--|------------------------------------|---|
| May 2016 end-of-course examination & June 2016 resit | Continuous assessment + Final exam | Continuous assessment: 40% Final exam: 60% |
| January 2016 resit | Final exam | Final exam: 100% |

Continuous assessment tests and activities will be carried out during lectures, in-class practical sessions and group tutorials, and students must attend classes in the group to which they have officially been assigned.

The top score on the continuous assessment (4 points out of 10) can be earned as follows:

- During lectures, throughout the semester in which the course is taught, students will take several diverse objective tests accounting for a maximum of 2 points. The purpose of these tests is for the student to demonstrate the skills acquired at specific points in time during the course; therefore, these tests are **not repeatable nor reassessable**. Should tests be made up of multiple-choice and true/false questions, scoring rules will penalize wrong answers.
- During in-class practical sessions, throughout the semester in which the course is taught, several diverse objective tests will be held which are worth a maximum of 2 points. The purpose of these tests is for the student to demonstrate the skills acquired at specific points in time during the course; therefore, these tests are **not repeatable nor reassessable**. Should tests be made up of multiple-choice and true/false questions, scoring rules will penalize wrong answers.

Summary Table 2

| Assessment | Activities and evaluation | Maximum grade (out of 10) |
|------------------------------|---|------------------------------|
| Continuous assessment | During lectures | 2 |
| | During in-class practical sessions | 2 |
| | | |
| Final exam | Written test consisting of both theoretical questions and practice exercises. | 6 |

Successful completion of the course is achieved when the student attains a final passing grade of 5 points or above (out of 10).

Part-time students assessment

Nevertheless, pursuant to article 7 of the regulations governing the assessment of learning outcomes and competencies acquired by students, those part-time students who have successfully proven their eligibility, may undergo one test only which will be scheduled on the same date as the final exam above referred for the rest of students. The top score on this test, the only one that part-time students have to take, is 10 points and successful completion of the course is achieved when the student attains a final passing grade of 5 points or above.

8. Resources, bibliography and complementary documentation

Laws and regulations

Real Decreto 1514/2007, de 16 de noviembre, por el que se aprueba el Plan General de Contabilidad (BOE de 20 de noviembre).

Real Decreto 1515/2007, de 16 de noviembre, por el que se aprueba el Plan General de Contabilidad de Pequeñas y Medianas Empresas y los criterios contables específicos para microempresas (BOE de 21 de noviembre).

Basic bibliography in Spanish

Varios Autores (2010): "Manual de Introducción a la Contabilidad", Ediuno Servicio de Publicaciones de la Universidad de Oviedo, Oviedo.

Varios Autores (2013): "Supuestos Prácticos de Introducción a la Contabilidad", Ediuno, Servicio de Publicaciones de la Universidad de Oviedo, Oviedo.

Supplementary bibliography in Spanish

Arquero Montano, J. L.; Jiménez Cardoso, S. M. y Ruiz Albert, I. (2011): "Introducción a la Contabilidad", Pirámide, Madrid.

Larrán Jorge, M. (Coord.) (2009): "Fundamentos de Contabilidad Financiera. Teoría y Práctica", Pirámide, Madrid.

García Benau, M. A. (2011): "Introducción a la Contabilidad", Centro de Estudios Financieros, Madrid.

López Díaz, A. (Dir.) (2008): "Manual de Contabilidad Financiera", Universitas, Madrid.

Montesinos Julve, V. (2010): "Fundamentos de Contabilidad Financiera", Pirámide, Madrid.

Varios Autores(2009a): "Manual de Contabilidad Financiera y Analítica I", Servicio de Publicaciones de la Universidad de Oviedo, Oviedo.

Varios Autores(2009b): "Manual de Contabilidad Financiera y Analítica II", Servicio de Publicaciones de la Universidad de Oviedo, Oviedo.

Wanden-Berghe, J.L. y Fernández Daza, E. (2012): "Introducción a la Contabilidad", Pirámide, Madrid.

Bibliography in English

Albrecht, W.S., Stice, E.K. and Stice, J.D. (2011): "Financial Accounting Concepts", 11th Edition, South-Western, Mason, USA.

Alexander, D. and Nobes, C. (2010): "Financial Accounting: An International Introduction", 4th Edition, Prentice Hall, Harlow, England.

Harrison, W.T., Horngren, C.T., Thomas, C.W. and Suwardy, T. (2011): "Financial Accounting", 8th Edition, Pearson.

Furthermore, students can avail of additional study materials developed by faculty staff through the University of Oviedo virtual learning platform:

www.campusvirtual.uniovi.es

As basic accounting information resources, students may also visit the website of the following national and international bodies:

| Body | Website |
|---|--|
| Asociación Española de Contabilidad y Administración de Empresas (AECA) | www.aeca.es |

| | |
|---|--|
| Comisión Nacional del Mercado de Valores (CNMV) | www.cnmv.es |
| Instituto de Contabilidad y Auditoría de Cuentas (ICAC) | www.icac.meh.es |
| International Accounting Standards Board (IASB) | www.iasb.org |
| Unión Europea (UE) | www.ec.europa.eu/internal_market/accounting |

Subject Guide

1. Information about the subject

| | | | | |
|--|---|-------------------------|--|--|
| SUBJECT | Economía de la Empresa/Introduction to Business | | CODE | GADEMP01-1-010/GECONO01-1-003 GCONFI01-1-009/GRLYRH01-1-005 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Economics Degree in Accounting and Finance Degree in Labour Relations and Human Resources | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Formación Básica/Basic | N° TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
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2. Context

This is a “basic core” subject in 7 different degrees at University of Oviedo. In the Bachelor’s degree in Business Administration it belongs to the topic “Principles of Management” within the module “Organization and Management”. In the Bachelor’s degree in Economics it belongs to the topic “Principles of Management” within the module “Organization and Management”. In the Bachelor’s degree in Accounting and Finance it belongs to the topic “Principles of Management” within the module “Organization and Management”. In the Bachelor’s degree in Labour Relations and Human Resources it belongs to the topic “Work Organisation and Human Resource Management”. It is scheduled in the first semester and it is the first subject that the student will take from the area of Management. Therefore, the role of the subject is to present a general overview of the firm. The final goal is to offer the student a description of management and organization fundamentals, as well as to provide her/him with an introduction to different subjects she/he will take in following courses.

3. Requirements

The prerequisites to follow this subject are just those that regulate admission into the degree.

4. Competencies and learning results

General competences

CG1: Ability to analyze and synthesize

CG2: Learning ability

CG3: Fluent oral and written communication in mother tongue

CG4: Knowledge and understanding of other languages, mainly English

CG5: Skills at searching for and analyzing information in the working environment

CG7: Ability to work and learn independently

CG8: Teamwork abilities

CG10: Critical reasoning

CG11: Decision-making

CG12: Ability to put knowledge into practice

CG13: Creativity

CG14: Initiative and entrepreneurship

CG16: Ability to organize and plan

CG18: Adaptability

CG19: Concern for quality and good work

CG20: Ethical commitment

Specific Competences:

CE1: To know the legal and social background of markets and firms

CE5: To understand the economic and institutional environment and its impact on business decisions

CE9: To understand the design of the organizational structure

CE14: To assess the suitability of investment projects and the most appropriate funding sources

CE18: To plan and manage an organization's human resources

CE20: To transmit information, ideas, problems and solutions in the area of business management to a specialized and to a non-specialized audience.

Learning Results:

- To understand the nature of the firm, its internal functioning and organizational structure
- To identify the internal and environmental factors that drive the competitive strategy of the firm
- To diagnose the conflicts underlying the relationship between the firm and its stakeholders and identify guidelines for action
- To identify the threats and opportunities coming from the national and international environment of the firm
- To master strategic thinking about local and international businesses
- To design the most appropriate organizational structure for a firm
- To design the human resources strategy
- To analyze issues related with firm growth and to motivate decision making
- To identify the different types of production systems and their strategic implications

5. Contents**Short contents**

Lesson 1. Introduction to business economics

Lesson 2. The strategy of the firm

Lesson 3. Types of business organizations

Lesson 4. Functional areas of a business

Lesson 5. Management

Extended contents and learning objectives

Lesson 1. Introduction to business economics

1.1. The role of firms in the economy

1.2. Entrepreneurship

1.3. Different frameworks to study business

1.4. Business objectives

Learning objectives

- Identify the role played by firms in their economic environment.
- Understand the reasons underlying the existence of firms, as well as how firms contribute to wealth creation.
- Recognize and understand different frameworks in the economic analysis of the firm.
- Identify which are the firm's stakeholders and their differing objectives.

Basic textbooks:

Online textbook: <http://intobusiness.weebly.com/topics.html>

Jones G. (2007): Chapters 1, and 5

Madura J. (2010): Chapters 1 and 2

Lesson 2. The strategy of the firm

- 2.1. Strategy: Concept and levels
- 2.2. Internal and external analysis
- 2.3. Competitive strategy
- 2.4. Corporate strategy

Learning objectives

- Identify the main characteristics of the firm`s environment, as well as how they affect the firm`s performance.
- Identify and analyze different factors that have an influence on the evolution of an industrial sector.
- Recognize different strategy levels and identify the competitive strategy followed by a firm in particular cases.
- Understand how firms strategically position themselves in the marketplace.
- Identify and describe different growth strategies and methods.

Basic textbooks:

Online textbook: <http://intobusiness.weebly.com/topics.html>

Jones G. and C. Hill (2008): Chapters 2, 5 and 9

Lesson 3. Types of business organizations

- 3.1. Classifying business organizations

3.2. Sole proprietorship

3.3. Corporation

3.4. Cooperative

Learning objectives

- Identify different criteria for classifying firms.
- Identify different forms of business organization from a legal perspective, as well as their distinctive features and advantages.
- Identify the disadvantages and problems related to each type of business organization, as well as the mechanisms that help solving them.

Basic textbooks:

Online textbook: <http://intobusiness.weebly.com/topics.html>

Madura J. (2010): Chapter 5

Jones G. (2007): Chapter 2

Lesson 4. Functional areas of a business

4.1. Operations

4.2. Marketing

4.3. Finance

Learning objectives

- Get a first approach to the functional areas of a business.
- Understand the basic concepts of operations, marketing and finance areas.
- Identify the different types of production systems and their suitability to different contexts.
- Identify potential decisions related to different marketing variables when facing a particular business problem.
- Understand the fundamentals of corporate finance and investment decisions.

Basic textbooks:

Online textbook: <http://intobusiness.weebly.com/topics.html>

Jones G. (2007): Chapters 10, 12, 14 and 15

Madura J. (2010): Chapters 15 and 16 (only Finance)

Lesson 5. Management

5.1. *Roles and functions of management*

5.2. Organizational structure

5.3. Human resource management

Learning objectives

- Understand the different functions of management, as well as the issues underlying the decision making process.

- Identify different management levels, as well as the skills a person should develop in order to suitably perform his/her work within each level.
- Identify the different structural dimensions of an organization and the most common structural forms.
- Identify the different managerial areas involved in human resource management, as well as activities and policies related to particular cases.

Basic textbooks:

Online textbook: <http://intobusiness.weebly.com/topics.html>

Jones G. (2007): Chapters 8 and 13

Madura J. (2010): Chapters 7 and 8

6. Methodology and working plan

Learning methodology includes both, activities which require attendance and activities which do not. Materials needed to correctly undertake all the activities will be available online at the university's e-Campus —teaching notes, readings, questions... The e-Campus also gives students the opportunity to develop discussion forums. The e-Campus will be used as the official communication channel with between the professor and the student. Therefore, regular use and daily revision is compulsory during the semester. **Very important: instructions for activities and deadlines will be posted on the e-Campus.**

In-class activities

Lectures: Sessions aimed at introducing and developing the key ideas and concepts of each topic. They involve a presentation by the teacher who will use audio-visual support. A basic bibliography will be available for students in order to help following and understanding these lectures.

Seminars: They are aimed at developing practical contents within each topic. They involve interaction between the teacher and the students. Students are expected to discuss issues and cases, critically formulate their own arguments, and solve problems related to the nature of the firm, its management, functional areas, organizational structure or strategy.

Group tutorials: They are aimed at solving questions, verifying that students understand and develop the contents correctly, suggesting students complementary bibliography, and checking the progress of teamwork. They will be structured in small groups in order to get a personal interaction teacher-student and provide extra help related to the particular difficulties of each student.

Evaluation sessions: To control the learning progress of the student.

Out-of-class activities.

Individual work: It is basically related to (1) studying the contents that are presented in lectures, and (2) preparing in advance the necessary material in order to be able to attend seminars.

Team work: Each student will participate in a team which will elaborate an essay on a topic related to the course contents. This work is aimed at developing the student's teamwork skills, as well as competences and skills related to gathering information, analyzing and summarizing contents, developing arguments and making public presentations.

Materials needed to correctly undertake all the activities will be available online at the university's e-Campus —teaching notes, readings, questions... The e-Campus also gives students the opportunity to develop discussion forums.

The following table summarizes a breakdown of different activities by lesson.

| | | In class activities | Out-of-class activities |
|--|--|---------------------|-------------------------|
|--|--|---------------------|-------------------------|

| Lessons | Total Hours | <i>Lectures</i> | <i>Seminars</i> | <i>Computer Classroom Practices</i> | <i>Group Tutorials</i> | <i>Evaluations Sessions</i> | Total | <i>Team Work</i> | <i>Individual Work</i> | Total |
|--------------------|--------------------|-----------------|-----------------|-------------------------------------|------------------------|-----------------------------|--------------|------------------|------------------------|--------------|
| Lesson 1 | 20.5 | 4.5 | 3 | | | | 7.5 | 3 | 10 | 13 |
| Lesson 2 | 30 | 4.5 | 4.5 | | | | 9 | 6 | 15 | 21 |
| Lesson 3 | 30 | 4.5 | 4.5 | | | | 9 | 6 | 15 | 21 |
| Lesson 4 | 31 | 5.5 | 4.5 | | | | 10 | 6 | 15 | 21 |
| Lesson 5 | 31 | 5.5 | 4.5 | | | | 10 | 6 | 15 | 21 |
| All lessons | 4 | | | | 4 | | 4 | | | |
| Evaluation process | 3.5 | | | | | 3.5 | 3.5 | | | |
| Total Hours | 150 | 24.5 | 21 | | 4 | 3.5 | 53 | 27 | 70 | 97 |
| (%) | 100 | 16.3 | 14 | | 2.7 | 2.3 | 35.3 | 18 | 46.7 | 64.7 |

| ACTIVITIES | | Hours | % | Total |
|--------------|--------------------|-------|------|-------|
| In-class | Lectures | 24.5 | 16.3 | 53 |
| | Seminars | 21 | 14 | |
| | Group Tutorials | 4 | 2.7 | |
| | External Practices | 0 | | |
| | Assessment | 3.5 | 2.3 | |
| | | | | |
| Out-of-class | Team work | 27 | 18 | 97 |
| | Individual work | 70 | 46.7 | |
| | Total | 150 | | |

7. Evaluation of the student's learning results

The following table shows the grading process that will be followed in this subject. Both, the grading process and the weights of the different activities on the final grade will be followed also for the extraordinary evaluation. Controlled assessment activities will not be repeated in extraordinary evaluations. However, the student's grade of controlled assessment in the ordinary evaluation will be kept for extraordinary evaluations.

Summary Table

| Assessment | Activities | Weight in final grade (%) |
|------------------------------|---|---|
| Controlled assessment | <ul style="list-style-type: none"> <li data-bbox="412 651 1572 815">· Activity 1: Students will have to complete various learning assignments individually. In order to be evaluated the student has to: (I) fulfill each assignment, (II) personally hand in the written paper to the teacher, and (III) participate in the classroom discussion about the assignment. The teacher will inform students about the submission deadline for each assignment. Students are also expected to actively participate in the seminar sessions. <li data-bbox="412 927 1572 991">· Activity 2: Team-work. The students will be required to make a presentation of this work in the classroom. | <p data-bbox="1809 555 1845 580" style="text-align: center;">30</p> <p data-bbox="1809 1129 1845 1155" style="text-align: center;">10</p> |
| Final exam | <ul style="list-style-type: none"> <li data-bbox="412 1401 1518 1426">· Final exam (multiple choice test). One right answer and penalty of 1/3 for wrong | 60 |

| | | |
|--|----------|--|
| | answers. | |
|--|----------|--|

8. Resources, bibliography and complementary documentation

This course is available on e-Campus. This site gives access to the course guide, the slides, teaching materials (cases, readings, ...) and some other multimedia resources (videos, podcasts, etc.). We will use the e-Campus on a regular basis to communicate important information about assignments, deadlines and other events.

Basic textbooks in English

Online textbook: <http://intobusiness.weebly.com/topics.html>

Jones, G.R (2007), *Introduction to Business*, McGraw Hill.

Madura, J. (2010), *Introduction to Business*, Thomson.

Pride, W, Hughes, R. and J. Kapoor (2008), *Business*, Cengage Learning.

Basic textbooks in Spanish

Cuervo García, A. (director), 2008, *Introducción a la Administración de Empresas*, 5ª ed., Civitas, Madrid.

González, E. y J. Ventura, (2003), *Fundamentos de Administración de Empresas*, Pirámide, Madrid.

Other textbooks

Dalf, R.L. (2005), *Teoría y Diseño Organizacional*, Paraninfo.

Fernández, E. (2005), *Dirección Estratégica de la Empresa. Fundamentos y Puesta en Práctica*, Delta, Madrid.

Fernández, E. (2010), *Administración de Empresas. Un enfoque interdisciplinar*, Paraninfo, Madrid.

Fernández, E., Avella, L. y M. Fernández (2006), *Estrategia de Producción*, McGraw-Hill, Madrid.

Fernández, E., Junquera, B. y J. del Brío, (2008), *Iniciación a los Negocios. Aspectos Directivos*, Thompson, Madrid.

Fernández, A.I. (1994), *Introducción a las Finanzas*, Civitas.

Gómez-Mejía, L., Balkin, D. y R. Cardy (2008), *Managing Human Resources*, Prentice Hall.

Grant, R.M. (2006), *Contemporary Strategy Analysis*, Wiley.

Kotler, P. and Armstrong, G. (2003), *Principles of Marketing*, Prentice Hall.

Mintzberg, H. (2000), *The Structuring of Organizations*, Prentice Hall.

Vázquez, R., Trespacios, J. e I. Rodríguez (2005), *Marketing: Estrategias y Aplicaciones Sectoriales*, Civitas, Madrid.

Ventura, J. (2008), *Análisis Estratégico de la Empresa*, Thomson Paraninfo, Madrid.

Subject Guide

1. Information about the subject

| | | | | |
|----------------------------------|---|-------------------------|--|----------------|
| SUBJECT | Métodos Estadísticos para la Empresa/Statistical Methods for Business | | CODE | GADEMP01-2-001 |
| EDUCATIONAL OFFER | Graduado o Graduada en Administración y Dirección de Empresas Degree in Business Administration and Management | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | Nº TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| LANDAJO ALVAREZ MANUEL | | landajo@uniovi.es | | |
| LECTURERS | | EMAIL | | |
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| RAMOS CARVAJAL MARIA DEL CARMEN | | cramos@uniovi.es | | |

2. Context

Course guide STATISTICAL METHODS FOR BUSINESS

1. Course description

| | | | | | |
|----------------------------------|-------------------------------------|----------------------------------|-----------------------------------|-----------------------------------|--|
| NAME | Statistical Methods for Business | | CODE | GADEMP01-2-001 | |
| CERTIFICATION | Administration and Management (ADE) | CENTER | Faculty of Economics and Business | | |
| TYPE | Compulsory | TOTAL NUMBER OF CREDITS | 6 | | |
| PERIOD | 2nd semester | LANGUAGE | Spanish / English | | |
| COORDINATOR | | PHONE / EMAIL | | LOCATION | |
| Manuel Landajo Alvarez | | 985105055 / landajo@uniovi.es | | 2nd. Floor, Wing 4, Office No. 13 | |
| LECTURERS | | PHONE / EMAIL | | LOCATION | |
| Mercedes Alvargonzález Rodríguez | | 985103757/ malvarg@uniovi.es | | 2nd. Floor, Wing 4, Office No. 3 | |
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| Manuel Landajo Alvarez | | 985105055 / landajo@uniovi.es | | 2nd. Floor, Wing 4, Office No. 13 | |

| | | |
|-----------------------|-----------------------------------|--------------------------------------|
| Blanca Moreno Cuartas | 985105052 / morenob@uniovi.es | 2nd. Floor, Wing 4, Office No. 1 |
| Carmen Ramos Carvajal | 985105054 / cramos@uniovi.es | 2nd. Floor, Wing 4, Office No. 14 |
| Maria Vicente Cuervo | 985105053 / mrosalia@uniovi.es | 2nd. Floor, Wing 4, Office No. 15 |
| | | |

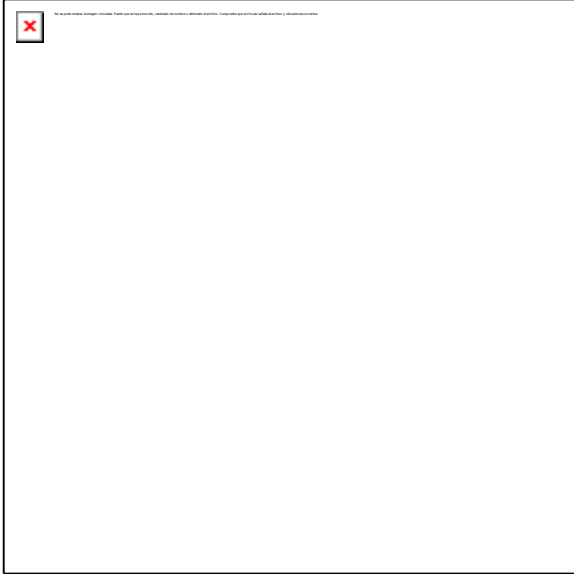
2. Role of the subject

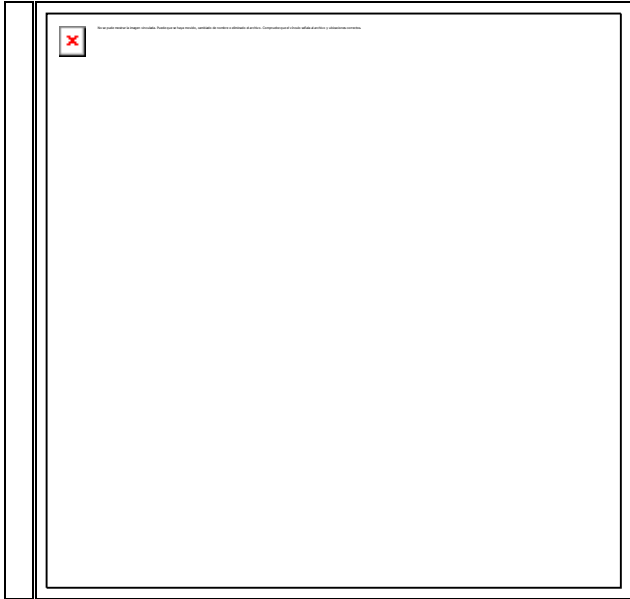
Statistics plays an important role in the development of society. That is why it is included in degrees in Business Administration (ADE) of the Spanish and European universities.

Statistical studies are organized in the degree of Business Administration from the University of Oviedo through a set of basic training courses, compulsory and optional.

Thus, in the second half of 1st course we find the subject called *Introduction to Economic Statistics*, with an identical program in the degrees in Business Administration, Economics, Accounting and Finance, and Labor Relations and Human Resources. It presents the main tools of descriptive statistics and economic statistics.

In the second half of 2nd course we find *Statistical Methods for Business* -included under the "Statistics" topic, within the "Quantitative Methods" module of the ADE degree- which studies contents of probability calculus and statistical inference.





As shown in the diagram, statistical studies continue in the third and fourth courses of the degree. In the third year it is included the subject *Econometrics*, devoted to estimate and test econometric models. In fourth course, the optional subject *Statistical Data Analysis*, examines a set of common statistical tools in the economic context, so students can solve real problems of data collection and analysis. Also, the course addresses a set of statistical techniques aimed at quality control and decision making in the economic /business areas.

In addition to the interplay between statistical subjects themselves, and as a natural consequence of its instrumental role in the subject curriculum, the skills that these subjects provide are used in other more specific degree subjects.

In this context, the overall objective of the course *Statistical Methods for Business* is to provide a set of statistical tools for solving problems through the use of sample information. The course will study probability models that are used in economics and business. It also discusses the fundamentals of statistical inference, with special emphasis on the construction of confidence intervals and hypothesis testing.

3. Requirements

- 3. Prerequisites

- Basic statistical knowledge (e.g., averages, dispersion measures, two-dimensional distributions), discussed in the *Introduction to Economic Statistics* course.
- Mathematical knowledge to understand proofs.

4. Competencies and learning results

4. Competences and learning outcomes

Upon completion of the course students should be able to acquire the following skills:

- Ability for analysis and synthesis.
- Learning ability.
- Ability to research and analyze information sources in the field of work.
- Ability to use computer and communication technologies.
- Ability to work independently.
- Self-critical ability.
- Ability to apply knowledge into practice.
- Concern for quality and a job well done.
- Ability to make decisions.

The **specific skills** developed in the course are:

- To identify and apply appropriate quantitative tools to analyze economic data.
- To manage and interpret specific software for data processing.
- To transmit information, ideas, problems and solutions in the field of business management to a general audience.

The former general and specific skills are specified in the following **learning outcomes**:

- To apply probability models to describe the behaviour of economic variables.
- Inferential statistical tools applied to solving problems in economics and business.
- To use appropriate software to solve statistical problems.

5. Contents

5. Contents

The course guide is divided into 11 lessons, gathered into two blocks: the first block, corresponding to the items 1 to 5, focuses on the study of probability. The second

block, which includes items from 6 to 11, is based on the analysis and study of the main tools of statistical inference, devoting particular attention to confidence intervals and statistical hypothesis testing.

5.1 Abbreviated Programme

Unit 1 .- Uncertainty and probability.

Item 2 .- Random magnitudes.

Item 3 .- Discrete probability models.

Item 4 .- Continuous probability models.

Unit 5 .- Joint analysis and limit theorems.

Item 6 .- Introduction to sampling. Estimators.

Item 7 .- Inferential tools. Distributions associated with sampling.

Item 8 .- Interval estimation.

Unit 9 .- Introduction to hypothesis testing.

Unit 10 .- Parametric tests.

Unit 11 .- Non-parametric tests.

5.2 .- Detailed program and learning objectives

Unit 1 .- Uncertainty and probability.

Contents:

- 1.1 .- Probability. Concepts and quantification.
- 1.2 .- Axiomatic definition of probability.
- 1.3 .- Conditional probability and independence.
- 1.4 .- Total Probability and Bayes theorem.

Objectives:

Specific learning objectives to be achieved by the student:

- To understand the various concepts of probability (classical, frequency and subjective).
- To distinguish the main terms used in combinatorial calculus.
- To properly interpret the concepts of complementary event, union and intersection of events, independent events and mutually exclusive events.
- To identify partitions of the sample space, and to apply the total probability and Bayes theorem.
- To properly interpret a priori and a posteriori probabilities and probability values.

Reference material:

[WALPOLE](#), R.E.; [MYERS](#), R.H.; [MYERS](#); S.L.; KEYING, E. (2011): [Probability and Statistics for Engineers and Scientists \(9th Edition\)](#). Ed. Prentice Hall. Chapter 1.

DOWNING, D.; CLARK, J. (2010): *Business Statistics*. Barron's Educational Series.

NEWBOLD, P., CARLSON, W., THORNE, B. (2008): *Statistics for Management and Economics*. Ed. Prentice Hall.

Unit 2 .- Random magnitudes.

Contents:

- 2.1 .- Random variable. Discrete and continuous variables.
- 2.2 .- Probability distribution of a random variable.
- 2.3 .- Characteristics of random variables. Expected value and dispersion.

Objectives:

The second topic introduces the concepts of random variable and probability distribution, which are of fundamental importance in this subject. At the end of the unit, students should be able to:

- Describe the concept of random variable, justifying the presence of uncertainty in the economic field.
- Distinguish between discrete and continuous variables.
- Calculate cumulative probabilities and probabilities for generic intervals, for both discrete and continuous variables.
- Calculate and interpret the expected value and variance of a random variable.

Reference material:

[WALPOLE](#), R.E.; [MYERS](#), R.H.; [MYERS](#); S.L.; KEYING, E. (2011): [Probability and Statistics for Engineers and Scientists \(9th Edition\)](#). Ed. Prentice Hall. Chapters 2 and 3.

DOWNING, D.; CLARK, J. (2010): *Business Statistics*. Barron's Educational Series.

ANDERSON, D.R.; SWEENEY, D.J.; WILLIAMS, T.A. (2011): *Statistics for Business and Economics*. Thomson Press (India) Ltd.

Unit 3 .- Discrete probability models.**Contents:**

3.1 .- Bernoulli processes and related distributions.

3.1.1- Binomial model.

3.1.2- Geometric model.

3.2 .- Hypergeometric Model.

3.3 .- Poisson model.

Objectives:

This lesson is aimed at familiarizing students with the main discrete probability models and their economic and business applications, so they should be able to:

- Identify key discrete probability models, realizing the assumptions they are based on.
- Handle expressions of the expectation and the variance of the main models.
- Calculate probabilities for the main models.

Reference material:

[WALPOLE](#), R.E.; [MYERS](#), R.H.; [MYERS](#); S.L.; KEYING, E. (2011): [Probability and Statistics for Engineers and Scientists \(9th Edition\)](#). Ed. Prentice Hall. Chapter 4.

[WACKERLY](#), D.; [MENDENHALL III](#), W.; [SCHEAFFER](#), R.L. (2008): *Mathematical Statistics With Applications*. Ed. Thomson.

BREMNER, J.M.; MORGAN, B.J.T.; JOLLIFFE, I.T.; JONES, B.; NORTH, P.M.; E. E. BASSETT; E.E. (2000): *Statistics: Problems and Solutions*. World Scientific Publishers.

Unit 4 .- Continuous probability models.

Contents:

4.1 .- Uniform model.

4.2 .- Normal model.

4.3 .- Other models.

Objectives:

This lesson tries to familiarize students with major continuous probability models, and especially with the Normal model and its economic and business applications, so they should be able to:

- Identify the uniform distribution and calculating probabilities.
- Describe the Normal model, its characteristics and apply the standardization process.
- Handle the tables of the Normal distribution in order to get probabilities or values.

Reference material:

[WALPOLE](#), R.E.; [MYERS](#), R.H.; [MYERS](#); S.L.; KEYING, E. (2011): [Probability and Statistics for Engineers and Scientists \(9th Edition\)](#). Ed. Prentice Hall. Chapter 5.

OLSON OLTMAN, D.; LACKRITZ, J.R. (1991): *Statistics for Business and Economics*. Ed. Brooks/Cole Publishing Company.

CANAVOS, G.C. (1984): *Applied Probability and Statistical Methods*. Ed. Little, Brown and Company.

Unit 5 .- Joint analysis and limit theorems.**Contents:**

5.1 .- K-dimensional distributions.

5.2 .- Independent random variables. Properties.

5.3 .- Aggregates of random variables.

5.4 .- Central Limit Theorem and its applications.

Objectives:

- To apply the main properties derived from the independence of random variables.
- To calculate probabilities for the main aggregates of independent random variables.
- To apply and interpret the Central Limit Theorem.

Reference material:

[WALPOLE](#), R.E.; [MYERS](#), R.H.; [MYERS](#); S.L.; KEYING, E. (2011): [Probability and Statistics for Engineers and Scientists \(9th Edition\)](#). Ed. Prentice Hall. Chapter 6.

CANAVOS, G.C. (1984): *Applied Probability and Statistical Methods*. Ed. Little, Brown and Company.

CHOU, Y.L. (1989): *Statistical Analysis for Business and Economics*. Ed. Elsevier.

Unit 6 .- Introduction to sampling. Estimators.**Contents:**

6.1 .- Sample surveys. Sample selection techniques.

6.2 .- Simple random sampling. Distribution of the sample.

6.3 .- Estimators and their properties.

6.4 .- Methods of obtaining estimators.

Objectives:

This unit lays out the basics of statistical sampling and presents the theory of estimation. Its objectives are:

- To present the basic ideas of sampling.

- To analyze the benefits and risks associated with the inferences carried out on samples.
- To study the concept of simple random sample.
- To describe the concept of estimator.
- To calculate and interpret the bias and mean square error of an estimator.
- To analyze the basic properties of estimators.
- To derive and interpret the maximum likelihood estimator of a parameter.
- To derive and interpret estimators by the method of moments.

Reference material:

[WALPOLE](#), R.E.; [MYERS](#), R.H.; [MYERS](#); S.L.; KEYING, E. (2011): [Probability and Statistics for Engineers and Scientists \(9th Edition\)](#). Ed. Prentice Hall. Chapters 6 and 7.

DOWNING, D.; CLARK, J. (2010): *Business Statistics*. Barron's Educational Series.

NEWBOLD, P., CARLSON, W., THORNE, B. (2008): *Statistics for Management and Economics*. Ed. Prentice Hall.

Unit 7 .- Inferential tools. Distributions associated with sampling.**Contents:**

7.1 .- Distributions associated with the sampling process.

7.2 .- Inferential processes and relevant distributions.

Objectives:

This topic introduces the main distributions used in statistical inference. The learning objectives for students are:

- To describe the chi-square and Student's t distributions.
- To calculate probabilities and quantiles.
- To apply the main pivotal statistics used in inferential processes on the mean, the proportion and variance.

Reference material:

[WALPOLE](#), R.E.; [MYERS](#), R.H.; [MYERS](#); S.L.; KEYING, E. (2011): [Probability and Statistics for Engineers and Scientists \(9th Edition\)](#). Ed. Prentice Hall. Chapters 6 and 7.

[WACKERLY](#), D.; [MENDENHALL III](#), W.; [SCHEAFFER](#), R.L. (2008): *Mathematical Statistics With Applications*. Ed. Thomson.

BREMNER, J.M.; MORGAN, B.J.T.; JOLLIFFE, I.T.; JONES, B.; NORTH, P.M.; E. E. BASSETT; E.E. (2000): *Statistics: Problems and Solutions*. World Scientific Publishers.

Unit 8 .- Interval Estimation.

Contents:

- 8.1 .- Introduction to interval estimation.
- 8.2 .- Confidence intervals. Construction and characteristics.
- 8.3 .- Confidence intervals for the mean.
- 8.4 .- Confidence intervals for the proportion.
- 8.6 .- Confidence intervals for the variance.

Objectives:

This is one of the main units of the course and its purpose is to study interval estimation procedures, so that students are able to:

- Interpret the characteristics of precision and confidence of an estimator.
- Describe the respective advantages and limitations of point and interval estimation.
- Construct confidence intervals for the mean.
- Calculate the sample size required to estimate the mean.
- Build confidence intervals for the proportion and variance.
- Calculate the sample size required to estimate the proportion.

Reference material:

[WALPOLE](#), R.E.; [MYERS](#), R.H.; [MYERS](#); S.L.; KEYING, E. (2011): [Probability and Statistics for Engineers and Scientists \(9th Edition\)](#). Ed. Prentice Hall. Chapter 7.

NEWBOLD, P., CARLSON, W., THORNE, B. (2008): *Statistics for Management and Economics*. Ed. Prentice Hall.

CANAVOS, G.C. (1984): *Applied Probability and Statistical Methods*. Ed. Little, Brown and Company.

Unit 9 .- Introduction to hypothesis testing.

Contents:

9.1 .- Basics of statistical hypothesis testing.

9.2 .- Types of errors in hypothesis testing.

9.3 .- Methodology and implementation of statistical tests.

Objectives:

- To understand statistical hypothesis testing and distinguish the types of errors that can occur in a test.
- To interpret the p-value of a test.

Reference material:

[WALPOLE](#), R.E.; [MYERS](#), R.H.; [MYERS](#); S.L.; KEYING, E. (2011): [Probability and Statistics for Engineers and Scientists \(9th Edition\)](#). Ed. Prentice Hall. Chapter 8.

DOWNING, D.; CLARK, J. (2010): *Business Statistics*. Barron's Educational Series.

NEWBOLD, P., CARLSON, W., THORNE, B. (2008): *Statistics for Management and Economics*. Ed. Prentice Hall.

Unit 10 .- Parametric tests.

Contents:

10.1 .- Tests for the mean.

10.2 .- Tests for the proportion.

10.3 .- Tests for the variance.

10.4.- Other parametric tests.

Objectives:

- To resolve tests on the mean, the proportion and variance.

Reference material:

[WALPOLE](#), R.E.; [MYERS](#), R.H.; [MYERS](#); S.L.; KEYING, E. (2011): [Probability and Statistics for Engineers and Scientists \(9th Edition\)](#). Ed. Prentice Hall. Chapter 8.

BREMNER, J.M.; MORGAN, B.J.T.; JOLLIFFE, I.T.; JONES, B.; NORTH, P.M.; E. E. BASSETT; E.E. (2000): *Statistics: Problems and Solutions*. World Scientific Publishers.

CANAVOS, G.C. (1984): *Applied Probability and Statistical Methods*. Ed. Little, Brown and Company.

Unit 11 - Non-parametric tests.**Contents:**

11.1.- Normality testing.

11.2 .- Independence testing.

11.3.- Other nonparametric tests.

Objectives:

- To apply Normality tests.
- To test for independence between two characteristics in a given population.
- To resolve tests on the randomness of the sample.

Reference material:

[WALPOLE](#), R.E.; [MYERS](#), R.H.; [MYERS](#); S.L.; KEYING, E. (2011): [Probability and Statistics for Engineers and Scientists \(9th Edition\)](#). Ed. Prentice Hall. Chapters 8 and 14.

CANAVOS, G.C. (1984): *Applied Probability and Statistical Methods*. Ed. Little, Brown and Company.

CHOU, Y.L. (1989): *Statistical Analysis for Business and Economics*. Ed. Elsevier.

6. Methodology and working plan**6. Methodology and working plan**

The course guide is organized into 11 units. The teaching of each topic is based on two types of activities: lectures and classroom practices, with an hour and a half weekly sessions. These activities are complemented by practical sessions in the computer lab/group tutorials.

The working plan for classroom activities is structured as follows:

- Lectures: These classes will analyze the overall motivation of the subject based on real situations in the economic sphere and give an overview of the theoretical part of each topic, with particular attention to key concepts and important developments.
- Classroom practice: Each class group will be divided into two subgroups for classroom practice sessions. These sessions will solve theoretical and practical issues and statistical exercises related to economic and business environment, supported by the tools introduced in the lectures.
- Practices in the computer lab/tutoring group: Each class group will be divided into subgroups to make four practice sessions in the computer room. The knowledge gained in these sessions will provide students with the skills to work independently, by using appropriate software, and solve the cases proposed along the course.

The teaching methodology and work plan of the course relies on the Virtual Campus www.campusvirtual.uniovi.es, in two ways:

- As a useful tool to solve doubts and download educational materials, since students will have in advance all the necessary materials for the supervision of the course: presentations for lectures, statements and data bases for practice, a collection of practical proposals for independent work and solved problems for each of the parts of the program.
- As an area of active student participation in the learning process.

The following table summarizes the distribution of time devoted to each type of activity of the subject. In class activities described above, an 61.33% of the total workload of the course is added for distance learning activities.

| | | In class work | | | | | | | | Distance learning work | | |
|--------------|-------------------|-----------------|--|----------------------|---------------------------|------------------------|---------------------------|----------------------------|--------------|------------------------|------------------------|--------------|
| <i>Units</i> | <i>Total time</i> | <i>Lectures</i> | <i>Classroom practices /seminars /workshos</i> | <i>Lab practices</i> | <i>Clinical practices</i> | <i>Group tutorials</i> | <i>External practices</i> | <i>Evaluation Sessions</i> | <i>Total</i> | <i>Group work</i> | <i>Autonomous work</i> | <i>Total</i> |
| 1 | 12 | 3 | 2 | | | | | | 5 | | 7 | 7 |
| 2 | 14 | 3 | 3 | | | 1 | | | 7 | | 7 | 7 |
| 3 | 10.5 | 2.5 | 2 | | | | | | 4.5 | | 6 | 6 |
| 4 | 9.5 | 2 | 1.5 | | | 1 | | | 4.5 | | 5 | 5 |
| 5 | 14 | 3 | 3 | | | | | | 6 | | 8 | 8 |
| 6 | 12 | 3 | 2 | | | | | | 5 | | 7 | 7 |
| 7 | 6.5 | 2 | 0.5 | | | | | | 2.5 | | 4 | 4 |
| 8 | 14 | 3 | 3 | | | 1 | | | 7 | | 7 | 7 |
| 9 | 6.5 | 2.5 | | | | | | | 2.5 | | 4 | 4 |
| 10 | 10 | 2 | 2 | | | | | | 4 | | 6 | 6 |

| | | | | | | | | | | | | |
|--------------|------------|--------------|-----------|--|--|-------------|--|-------------|--------------|--|--------------|--------------|
| 11 | 11 | 2 | 2 | | | 1 | | | 5 | | 6 | 6 |
| Final exam | 30 | | | | | | | 5 | 5 | | 25 | 25 |
| Total | 150 | 28 | 21 | | | 4 | | 5 | 58 | | 92 | 92 |
| (%) | | 18.67 | 14 | | | 2.67 | | 3.33 | 38.67 | | 61.33 | 61.33 |
| | | | | | | | | | | | | |

The training activities in the above table consist of classroom lectures, practical classes and practices in the computer room. For each item there will be a formal presentation of the methodology in the lectures in sessions of 1.5 hours, then the application in practical classes in sessions of 1.5 and 1 hour in the computer room. Practical exercises are solved with the support of statistical software. Distance learning activities will focus on students' self-study of the theoretical and practical cases resolution as well as on carrying out the different activities proposed.

All the material containing both theoretical and practical issues is available on the website of the subject in the Virtual Campus. The Virtual Campus' training materials are supplemented by bibliographies of statistics texts which are available for consultation and loan in the Library of Legal and Social Sciences (<http://buo.uniovi.es/>).

The following table is an estimated schedule of the subject, which may vary slightly depending on the weekly teaching organization of each group.

| Week | Class work | Individual work |
|-------------|--|---|
| 1 | Presentation of the course. Unit 1.- Uncertainty and probability | Study of unit 1 Review of materials |
| 2 | Unit 1.- Uncertainty and probability Unit 2.- Random magnitudes 1st computer-aided practicum | Study of units 1 and 2 Review of materials |

| | | |
|-----------|--|---|
| 3 | Unit 2.- Random magnitudes 1st computer-aided practicum | Study of unit 2 Review of materials |
| 4 | Unit 2.- Random magnitudes Unit 3.- Discrete probability models | Estudio temas 2 y 3 Review of materials |
| 5 | Unit 3.- Discrete probability models 2nd computer-aided practicum | Study of unit 3 Review of materials |
| 6 | Unit 4.- Continuous probability models 2nd computer-aided practicum | Study of unit 4 Review of materials |
| 7 | Unit 4.- Continuous probability models Unit 5.- Joint analysis and limit theorems | Study of units 4 and 5 Review of materials |
| 8 | Unit 5.- Joint analysis and limit theorems | Study of unit 5 Review of materials |
| 9 | Unit 5.- Joint analysis and limit theorems Unit 6.- Introduction to sampling. Estimators | Study of units 5 and 6 Review of materials |
| 10 | Unit 6.- Introduction to sampling. Estimators 3rd computer-aided practicum | Study of unit 6 Review of materials |
| 11 | Unit 7.- Inferential Tools. Distributions associated with sampling Unit 8.- Interval estimation 3rd computer-aided practicum | Study of units 7 and 8 Review of materials |

| | | |
|----|---|---|
| 12 | Unit 8.- Interval estimation | Study of units 8 and 9 |
| | Unit 9.- Introduction to hypothesis testing | Review of materials |
| 13 | Unit 9.- Introduction to hypothesis testing | Study of units 9 and 10 |
| | Unit 9.- Parametric tests | Review of materials |
| | 4th computer-aided practicum | |
| 14 | Unit 10.- Parametric tests | Study of units 10 and 11 |
| | Unit 11.- Non-parametric tests | Review of materials |
| | 4th computer-aided practicum | |
| 15 | | Study of unit 11 |
| | Unit 11.- Non-parametric tests | Review of materials Preparation for final exam |

7. Evaluation of the student's learning results

7. Assessment

The evaluation of the course is based on two elements:

1. **Continuous assessment** of the effort and the work developed by students throughout the course, through different types of individual activities. The weight on the final score is 40%.
2. **Final exam**, consisting of a test set, to assess the knowledge acquired by students and their ability to apply statistical tools to analyze and solve study problems in the economic and business fields. The weight of the exam in the final score is 60%.

Description of ongoing evaluation activities

Continuous assessment will consist of 4 tests (all with equal weight), which will be carried out throughout the semester as part of the practical classes and group

tutorials.

The score of the continuous assessment activities will be the average of the scores in the previously mentioned tests and will be maintained (without possibility of repetition) for all calls (ordinary and extraordinary) of the course.

Rating System

In all calls (ordinary and extraordinary), the final grade (CFINAL) is obtained as a weighted average of final exam grades (C EXAM) and continuous assessment (C CONTINUOUS):

$$\mathbf{C\ FINAL = 0.6 \times CEXAM + 0.4 \times CCONTINUOUS}$$

Differentiated assessment

Students included in the system of differentiated assessment will do the final exam, having a weight of 60%, in the official dates established by the Faculty. The continuous assessment activities undertaken by students throughout the semester, with a weight of 40%, will be replaced by a test -consisting of a number of theoretical-practical issues- to be done on the same date of the final exam.

8. Resources, bibliography and complementary documentation

The main teaching resources for the course are available at the Virtual Campus www.campusvirtual.uniovi.es (presentations, case studies, documents, et cetera).

The following references are helpful for this subject:

Basic Bibliography

WALPOLE, R.E.; MYERS, R.H.; MYERS; S.L.; KEYING, E. (2011): *Probability and Statistics for Engineers and Scientists* (9th Edition). Ed. Prentice Hall.

Complementary Bibliography

DOWNING, D.; CLARK, J. (2010): *Business Statistics*. Barron's Educational Series.

NEWBOLD, P., CARLSON, W., THORNE, B. (2008): *Statistics for Management and Economics*. Ed. Prentice Hall.

ANDERSON, D.R.; SWEENEY, D.J.; WILLIAMS, T.A. (2011): *Statistics for Business and Economics*. Thomson Press (India) Ltd.

WACKERLY, D.; MENDENHALL III, W.; SCHEAFFER, R.L. (2008): *Mathematical Statistics With Applications*. Ed. Thomson.

BREMNER, J.M.; MORGAN, B.J.T.; JOLLIFFE, I.T.; JONES, B.; NORTH, P.M.; E. E. BASSETT; E.E. (2000): *Statistics: Problems and Solutions*. World Scientific Publishers.

OLSON OLTMAN, D.; LACKRITZ, J.R. (1991): *Statistics for Business and Economics*. Ed. Brooks/Cole Publishing Company.

CANAVOS, G.C. (1984): *Applied Probability and Statistical Methods*. Ed. Little, Brown and Company.

CHOU, Y.L. (1989): *Statistical Analysis for Business and Economics*. Ed. Elsevier.

Subject Guide

1. Information about the subject

| | | | | |
|-------------------------------------|---|-------------------------|--|----------------|
| SUBJECT | Economía Española y de la Unión Europea/The Economics of Spain and the E.U. | | CODE | GADEMP01-2-003 |
| EDUCATIONAL OFFER | Graduado o Graduada en Administración y Dirección de Empresas Degree in Business Administration and Management | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | Nº TOTAL CREDITS | 9.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
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| LECTURERS | | EMAIL | | |
| Hernandez Nanclares Nuria | | nhernan@uniovi.es | | |
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| HERNANDEZ MUÑIZ MANUEL | | mmuniz@uniovi.es | | |
| FONSECA CUEVAS MARIA PALMIRA | | pfonseca@uniovi.es | | |
| PEREZ RIVERO JOSE LUIS | | jrivero@uniovi.es | | |
| BENAVIDES GONZALEZ MARIA DEL CARMEN | | cbenavi@uniovi.es | | |
| ARGUELLES VELEZ MARGARITA | | marguel@uniovi.es | | |

2. Context

The course “Economics of Spain and the European Union”, taught in the second year of the degree in Business and Administration, offers the student concepts and tools to understand the way in which institutional and political environments influence the firms’ organization, functioning and decision making in areas such as investment, debt, specialization and contracting. The subject tackles the need to make students aware of their economic environment and to enable them understanding the major issues of the Spanish and the European Union economies, and applying this knowledge to the world of management all throughout their degree.

This subject aims to show the economic and political logic of the European integration process and how this process has influenced the development of the Spanish economy and its institutional organization, especially since the advent of democracy. The course gives the student a basic understanding of the institutional

architecture, the current situation, and the problems of the European and the Spanish economies in the early twenty-first century.

The program is structured as follows. The first section examines the historical process of the creation of the EU and of the Spanish economy. Then it proceeds to analyze the process of economic integration, growth and income distribution in the European and the Spanish economies. Macroeconomic policies implemented within the EU are discussed in section three. The program concludes with a section devoted to studying the basic economic sectors and the microeconomic policies that affect them, and the companies in them.

3. Requirements

No prior knowledge is required further than the typical of a student who has successfully passed the first year of the degree in ADE.

4. Competencies and learning results

The following tables contain the general and specific competences related to the material involved in this subject, as well as the corresponding learning goals.

| GENERAL COMPETENCES | SPECIFIC COMPETENCES |
|---|---|
| CG1: Capability for analysis and synthesis | CE3: Understand the basic mechanisms for the functioning and structure of markets. |
| CG2: Learning capability | CE4: Understand the macroeconomic context in which business activity takes place. |
| CG3: Capability for fluent oral and written communication in mother tongue | CE5: Understand the economic-institutional environment and its impact on business decisions. |
| CG4: Knowledge and understanding of other languages, mainly English | CE6: Identify and apply appropriate quantitative tools to the analysis of economic information. |
| CG5: Skill at searching for and analysing information in the working environment. | CE20: Transmit information, ideas, problems and solutions in the area of |
| CG6: Capability for using ICT tools | |
| CG7: Capability for working independently. | |

| | |
|--|--|
| CG8: Capability for teamwork | business management to a specialist or non-specialist audience. . CE21: Issue advisory reports on specific company and market situations. |
| CG9: Capability for working in an international context | |
| CG10: Critical and self-critical capability | |
| CG12: Capability for putting knowledge into practice | |
| CG18: Adaptability | |
| CG19: Concern for quality and good work. | |
| CG20: Values and ethics | |
| CG22: Integration of the principles of equal treatment and opportunities for men and women in the working environment. | |

Learning outcomes

RA1. To be able to understand and to remember the basic concepts models, and the most relevant theories regarding the economics of Spain and of the European Union

RA2. To be able to know and to understand the European and Spanish institutional structures and their consequences for firms

RA3. To know and handle the main sources of statistical information and data on the Spanish and European economies

- RA4. To identify and describe the major concepts and models of the Spanish and European economies by means of graphics, news, or articles, being able to understand the economic reasoning used.
- RA5. To use data, theories and graphs to analyze the Spanish and European economic environments, and their impact on businesses
- RA6. To develop a coherent discourse to argue on the Spanish economy and on the European integration process
- RA7. To relate knowledge acquired in other subjects studied with the studied models, in order to describe the complexity of the Spanish and European economies.
- RA8. To use new technologies as a means of communication and information search
- RA9. To work in groups with other students to learn, apply and integrate knowledge.
- RA10. To assess the quality of information sources they use in their learning.
- RA11. To recognize the quality of academic work, both in their own work and in others'.
- RA12. To be aware of the method of reasoning and be clear about how to use it in order to analyze new situations
- RA13. To know how to read articles and technical material, as well as interpret data and statistics.

5. Contents

General contents, and basic bibliography

I. HISTORY, FACTS AND INSTITUTIONS

Lesson 1.- Historical perspective of European integration and of the Spanish economy

Lesson 2.- Institutions, decision making and EU budget

II. INTEGRATION, GROWTH AND INCOME DISTRIBUTION

Lesson 3.- Basic theory of economic integration

Lesson 4.- Economic growth in the Single Market: effects over the Spanish economy

Lesson 5.- EU competition policy

Lesson 6.- Economic integration, labour markets and migration in Spain and in Europe

Lesson 7.- Income distribution and regional policy

III. INTEGRATION AND MACROECONOMIC POLICY

Lesson 8.- Optimum currency areas. The Economic and Monetary Union

Lesson 9.- Fiscal and monetary policy in the EU

IV. ECONOMIC SECTORS AND MICROECONOMIC POLICIES

Lesson 10.- The primary sector and the Common Agricultural Policy

Lesson 11.- The secondary sector

Lesson 12.- The services sector

Baldwin, R. & Wyplosz C. (2012): *The Economics of European Integration*, 4^a ed., McGraw Hill.

García Delgado, J. L. & Myro, R. (Dirs.) (2013): *Lecciones de Economía española*, 11^a ed. Thomson Reuters & Civitas.

Material elaborated by the teacher and recommended web pages.

Detailed contents and basic concepts

I. HISTORY, FACTS AND INSTITUTIONS

Lesson 1.- Historical perspective of European integration and of the Spanish economy

This lesson describes the political origin of the European Community and the integration process. It also covers the parallel evolution of the Spanish economy.

Basic concepts:

Autarchy and free trade

Multilateralism, regionalization

Approaches to European integration

Milestones: European Coal and Steel Community, Rome Treaty, Single European Act, Maastricht Treaty, Stability and Growth Pact

European Monetary System

Economic and Monetary Union

Autarchy, industrialization based on import substitution, balance of payments crisis, 1959 Stabilization Plan, Preferential Trade Agreement EEC-Spain, Accession Treaty

Economic crisis in the nineteen seventies, the Moncloa Pacts, economic principles of 1978 Constitution, entry into the EC (1986)

Convergence, divergence

Structural reforms in Spain

Lesson 2.- Institutions, decision making and EU budget

This lesson addresses the analysis of the institutions of the European Union and its influence on the Spanish economy. Also, basic data of the European Union and the countries that comprise it will be examined.

Basic concepts:

Institutional architecture of the European Union

The three pillars

Supranationality

Regulatory framework (Treaties, Regulations, Directives)

Direct effect and direct applicability; Principles of subsidiarity, proportionality and enhanced cooperation Institutions: Commission, Council, Parliament, European Council, European Court of Justice

Co-decision procedure.

Budget: revenues and expenses. Net contribution by member country

II. INTEGRATION, GROWTH AND INCOME DISTRIBUTION

Lesson 3.- Basic theory of economic integration

This lesson develops basic concepts and models to analyze trade integration in the European Union and compares it with the type of multilateral trade liberalization typical of the WTO.

Basic concepts:

Demand and supply of imports and exports

Big country, small country

Effects of tariffs: price effects of trade, trade volume and "dead weight" losses.

Free trade agreements, Most Favoured Nation, World Trade Organisation

Discriminatory trade liberalization, Regionalism, Customs Union

Effects of a Customs Union: trade creation and trade diversion effects, Viner ambiguity.

Lesson 4.- Economic growth in the Single Market: effects over the Spanish economy

The subject develops basic concepts and models to analyze the relationship between economic integration and growth. From the European Single Market, it also analyses the growth experienced by the Spanish and European economies.

Basic concepts:

Fragmented market, integrated market

Intra-industry and inter-industry trade

Dynamic effects of integration: Pro-competitive effect, economies of scale

Dynamic effects and industrial restructuring (plant closures and mergers / takeovers)

Potential GDP growth, TFP and apparent labour productivity

Application of Solow model, capital accumulation and investment rate

Long-term growth, technical progress (Solow A), catch up

Absorption and diffusion effects of knowledge

European Single Market

Non-tariff intraeuropean trade barriers

New approach to technical harmonization

Mutual recognition principle

Structural change, trade liberalization and Foreign Direct Investment

Lesson 5.- EU competition policy

The lesson examines why there is a competition policy to watch over competition in the Single Market. Also, the basic norms that regulate competition and the four spheres of applicability are revised.

Basic concepts:

Abuse of a dominant position

Firms' concentration

Agreements and practices between firms

Promoting competition y monopoly markets

Bidding practices

Control of state aid

Regional incentives

Lesson 6.- Economic integration, labour markets and migration in Spain and in Europe

This lesson examines the effects of economic integration on the labour markets, with special focus on mobility, migration and the labour market in Spain.

Basic concepts:

Free movement of persons and establishing freedom

Supply and demand for labour

Nominal and real rigidities in prices and wages

Collective bargaining

Unemployment

European Social Fund

European Employment Strategy

Effects of economic integration

Migration, Mobility

Spanish labour market

Passive and active policies

Training

Lesson 7.- Income distribution and regional policy

This lesson deals with the analysis of income distribution from different perspectives, comparing Spain vs. Europe. The lesson is completed by presenting the basic elements of the European Regional Policy.

Basic concepts:

Personal, functional and industrial distribution of income

Spatial income distribution

Economic growth and regional inequalities

Basic elements of European Regional Policy

Unit Labour Cost (ULC)

Concentration, dispersion, centripetal and centrifugal forces

III. INTEGRATION AND MACROECONOMIC POLICY

Lesson 8.- Optimum currency areas. The Economic and Monetary Union

This lesson conceptually analyses the transfer of monetary sovereignty to a European institution, the Central Bank, and the adoption of a single currency. The lesson summarizes the arguments for and against the single currency under the optimum currency areas (OCA) approach.

Basic concepts:

Optimum currency area theory

Macro shocks: symmetric and asymmetric shocks.

Sectorial specialization

Solutions to a shock in a monetary union

Flotation, purchasing power parity

Nominal convergence criteria

Lesson 9.- Fiscal and monetary policy in the EU

This lesson examines the Common Monetary Policy for the Eurozone and it analyses the rules of the Stability and Growth Pact and the EU economic governance.

Basic concepts:

Neutrality of money, the goal of price stability, monetary policy,

European Central Bank

Monetary Policy instruments: open market operations and permanent facilities

EONIA, EURIBOR

Stability and Growth Pact

Fiscal federalism

Automatic stabilizers

Coordination of fiscal policies

“No-bailout” Rule

Public Savings

Excessive Deficit Procedure (EDP)

European System of Accounts (SEC1995)

Financial capacity and borrowing needs of the institutional sectors in Spain and Europe

Great recession and the sovereign debt crisis

Eurozone economic governance

IV. ECONOMIC SECTORS AND MICROECONOMIC POLICIES

Lesson 10.- The primary sector and the Common Agricultural Policy

This last block analyses the three main sectors of the Spanish economy within the EU, together with the other micro policies related to each of them. This lesson tackles the primary sector of the Spanish economy, focusing on agriculture and the Common Agricultural Policy (CAP) and its future evolution.

Basic concepts:

Extensive and intensive agricultural guidelines

Traditional agriculture

Apparent labour productivity in agriculture

Common Agricultural Policy

Pricing Policy

Agricultural surpluses

Economic impact of CAP

Lesson 11.- The secondary sector

This lesson will analyze the productive and trade specialization of the Spanish industrial sector in the EU framework. The basic features of the energy and construction subsectors will be studied, focusing on the analysis of the housing market.

Basic concepts:

Apparent consumption

Industrial specialization

Industrial competitiveness

Product differentiation

Unit labor costs (ULC)

Energy balance

Tonne of oil equivalent (TOE)

Energy intensity

EU energy policy

Housing bubble

Subsidized housing

Lesson 12.- The services sector

This lesson addresses the tertiary sector by defining different ways of classifying tertiary activities, as well as the reasons for its strong growth in developed economies. The progress made in deregulation of services is presented.

Basic concepts:

Delimitation and classification of the services sector

Tertiary specialization

Determinants of growth in services

Outsourcing

Baumol's disease.

Deregulation of services.

6. Methodology and working plan

In-class teaching is based on theoretical and practical sessions and is complemented by continuous assessment activities (linked to *follow-up questions* and *readings*) and by tutorials.

Theoretical classes will consist of lectures (an explanation of the content of each lesson by the lecturer).

Practical classes and group tutorials will be devoted to two objectives. The first one is the consolidation of the knowledge and skills acquired in the theoretical lectures by means of exercises and their application to new cases. The second objective is to develop skills for analysis, application, integration and evaluation of the course contents, in keeping with learning outcomes stated in the syllabus. Each teacher will adapt these instructions to the specific conditions of each group taking into account the different conditions of each one.

The following tables show the distribution by time and lesson of the different activities.

| CATEGORIES | | Hours | % | Total |
|---------------|---|-------|--------|--------|
| In-class work | <i>Lectures</i> | 32,45 | 47,40% | 68,45 |
| | <i>Classroom practice , including computer classroom practice</i> | 28 | 40,90% | |
| | <i>Group tutorials</i> | 6 | 8,7% | |
| | <i>Assessment sessions</i> | 2 | 2,9% | |
| Out of class- | <i>Group work</i> | 30 | 19,1% | 156,55 |

| | | | | |
|------|------------------------|------------|-------|--|
| work | <i>Autonomous work</i> | 126,55 | 80,9% | |
| | Total | 225 | | |

| | | IN-CLASS WORK | | | | | OUT-OF-CLASS WORK | | |
|----------------|--------------------|-----------------|---|------------------------|----------------------------|--------------|-------------------|------------------------|--------------|
| <i>Lessons</i> | <i>Total hours</i> | <i>Lectures</i> | <i>Classroom practice , including computer classroom practice</i> | <i>Group tutorials</i> | <i>Assessment sessions</i> | <i>Total</i> | <i>Group work</i> | <i>Autonomous work</i> | <i>Total</i> |
| 1 | 15,5 | 2,75 | 2,25 | - | | 5 | | 10,5 | 10,5 |
| 2 | 20,5 | 2,75 | 2,25 | 1 | | 6 | 4 | 10,5 | 14,5 |
| 3 | 15,5 | 2,75 | 2,75 | | | 5 | | 10,5 | 10,5 |
| 4 | 21 | 2,75 | 2,75 | 1 | | 6,5 | 4 | 10,5 | 14,5 |
| 5 | 15,5 | 2,75 | 2,25 | | | 5 | | 10,5 | 10,5 |
| 6 | 20,5 | 2,75 | 2,25 | 1 | | 6 | 4 | 10,5 | 14,5 |
| 7 | 15,5 | 2,75 | 2,25 | | | 5 | | 10,5 | 10,5 |
| 8 | 20,5 | 2,75 | 2,25 | 1 | | 6 | 4 | 10,5 | 14,5 |
| 9 | 16 | 2,75 | 2,75 | | | 5,5 | | 10,5 | 10,5 |
| 10 | 20,5 | 2,2 | 2,25 | 1 | | 5,45 | 4,55 | 10,5 | 15,05 |

| | | | | | | | | | |
|--------------------|-------------|-------|------|---|---|--------------|----|--------|---------------|
| 11 | 16,5 | 2,75 | 2,25 | 1 | | 6 | | 10,5 | 10,5 |
| 12 | 19,5 | 2,75 | 2,25 | | | 5 | 4 | 10,5 | 14,5 |
| Other activities | 8 | - | - | - | 2 | 2 | | 6 | 6 |
| Total hours | 225 | 32,45 | 28 | 6 | 2 | 68,45 | 30 | 126,55 | 156,55 |

7. Evaluation of the student's learning results

Evaluation is based on the written examination, to be held on the day fixed by the School, and on continuous assessment activities. In the case of demonstrable proof of incompatible behaviour with academic honesty rules (see Reglamento de Evaluación), none of the marks obtained by any of the people involved will be taken into account for any of the affected course components (both continuous assessment activities and the examination).

The examination could include test questions and it could deal with a) concepts, b) graphic analyses, c) exercises, and d) applications. Continuous assessment is based upon practical activities that take place mainly in the classroom, which cover reading, analysis, and comment of articles or op-eds; analyses and interpretation of economic data related to course contents; and search and management of the information required for the different activities introduced by the lecturers during the semester.

In all examination periods, the final mark will consist of the sum of the points obtained in that examination (maximum of six points), and in the continuous assessment activities (maximum possible mark equivalent to four points). Continuous assessment grades obtained during the semester are kept for extraordinary examinations at the end of the academic year. It is important taking into account that the course cannot be passed without a minimum of two points in the exam.

Students eligible for differentiated evaluation could get the continuous assessment grade by handing out, through the virtual campus or in the final exam, the tasks required during the semester.

8. Resources, bibliography and complementary documentation

Basic references

Baldwin, R. & Wyplosz C. (2012): *The Economics of European Integration*, 4ª ed., McGraw Hill.

García Delgado, J. L. & Myro, R. (Directores) (2013): *Lecciones de Economía española*, 11ª ed. Thomson Reuters & Civitas.

Material elaborated by the teacher and recommended web pages.

Additional references

Banco de España (2013): *Informe Anual 2012*, Banco de España, Madrid.

European Commission (2010): *Europa 2020. EU Strategy for smart, sustainable and inclusive growth*, European Commission, Brussels.

Consejo Económico y Social (2013): *Economía, trabajo y sociedad. Memoria sobre la situación socioeconómica y laboral. España 2012*. Consejo Económico y Social, Madrid.

European Commission (2013): *Public finances in EMU*. Directorate-General for Economic and Financial Affairs.

Fundación FUNCAS: *Papeles de Economía Española* (several issues).

García Delgado, J. L. & Myro, R. (Directores) (2014): *The Spanish Economy. An Introduction*, Thomson Reuters & Civitas.

Jordán Galduf, J. M. (Coord.) (2013): *Economía de la Unión Europea*, 7th ed., Civitas.

Pérez García, F. (2011): *Crecimiento y competitividad: trayectoria y perspectiva de la economía española*, Fundación BBVA.

Sanchis i Marco. M. (2014): *The Economics of the Monetary Union and the Eurozone Crisis*. Springer.

Senior Nello, S. (2011): *The European Union. Economics, Policy and History*, 3rd ed., McGraw Hill.

Subject Guide

1. Information about the subject

| | | | | |
|-------------------------------|---|-------------------------|--|----------------|
| SUBJECT | Análisis Económico para la Empresa/Analysis for the Firm | | CODE | GADEMP01-2-004 |
| EDUCATIONAL OFFER | Graduado o Graduada en Administración y Dirección de Empresas Degree in English Administration | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | Nº TOTAL CREDITS | 9.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
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2. Context

This subject, which is taught in the first semester of second year, is a continuation of the subjects Introductory Microeconomics and Introductory Macroeconomics from the first year. It forms part of Module 5 of the Degree (Economic Analysis module), and Subject Matter 3 (Economics).

The objective of the subject is to complete students' training in core microeconomic and macroeconomic theory so that a sound knowledge of the economic environment in which firms operate is achieved. In the section dedicated to microeconomics, attention is focused on costs, production and different market structures. The second half of the subject is dedicated to macroeconomics, with a focus on labour markets, inflation and aggregate supply and demand.

3. Requirements

Students should have completed introductory courses in microeconomics and macroeconomics equivalent to the first-year subjects of Introductory Microeconomics and Introductory Macroeconomics.

4. Competencies and learning results

The basic objective of the subject is for the student to deepen their understanding of the basic tools of microeconomic and macroeconomic analysis.

General competencies:

The general competencies that students should attain are:

- Capability for analysis and synthesis.
- Learning capability.
- Capability for working independently.
- Critical and self-critical capability.
- Capability for putting knowledge into practice.
- Concern for quality and good work.

Specific competencies:

The specific competencies aimed at are:

- Understand the basic mechanisms for the functioning and structure of markets.
- Understand the macroeconomic context in which business activity takes place.
- Understand the economic-institutional environment and its impact on business decisions.

Having finished the subject, the following learning outcomes should be achieved:

- Understand the workings of different market structures and their consequences for economic efficiency.
- Understand the reasons for and effects of State intervention in markets.
- Understand how the workings of the aggregate economy and the interrelations between the different sectors and economic agents.

- Explain the causes of the main disequilibria in macroeconomics

5. Contents

Brief Programme

Topic 1: The organization of the market

Topic 2: Monopoly and Monopsony.

Topic 3. Monopolistic competition

Topic 4: Oligopoly and Game theory.

Topic 5: Market failure.

Topic 6: The labour market.

Topic 7: A macroeconomic model with flexible prices: Aggregate Demand and Aggregate Supply.

Topic 8: Inflation and unemployment: the Phillips Curve.

Topic 9: Inflation, economic activity and nominal money growth.

Topic 10: Reflections on macroeconomic policy.

Basic bibliography

Blanchard, O. Amighini, A. and Giavazzi, F. (2013), *Macroeconomics: A European Perspective*, Pearson, Second Edition.

Pindyck, R.S. and Rubinfeld, D.L. Frank, R. (2009), *Microeconomics* (7th edition). Pearson International Edition.

Detailed programme

SECTION 1. MICROECONOMICS

Topic 1. The organization of the Market

-Competitive versus non-competitive markets

- Different market structures

- Market power

Learning objectives:

- Understand how different types of markets are structured and what factors determine firms' market power

Reading material:

- Pindyck and Rubinfeld (2009), Chapters 1, 8 and 9.

Topic 2. Monopoly and Monopsony

- The monopolist's long-run equilibrium
- Sources and measures of monopoly power
- Monopoly with several plants
- The social costs of monopoly power and the need for regulation
- Price discrimination and the capture of consumer surplus
- Monopsony

Learning objectives:

- Identify monopolistic behaviour and compare these markets with perfectly competitive ones. Understand the consequences of monopoly power and the reasons for, and effects of, regulation in monopolistic markets.

Reading material:

- Pindyck and Rubinfeld (2009), Chapters 10 and 11.

Topic 3. Monopolistic competition

- Monopolistic competition.

- Short and long run equilibrium
- Monopolistic competition versus perfect competition.

Learning objectives:

- Understand how non-competitive markets function, with a special emphasis on product differentiation as a means to obtain market power.

Reading material:

- Pindyck and Rubinfeld (2009), Chapter 12.

Topic 4. Oligopoly and Game theory

- Characteristics of oligopolistic markets
- The Cournot and Stackelberg models
- Competition based on prices: The Bertrand Model
- Cartels
- Game theory

Learning objectives:

In this chapter we deal with strategic firm behaviour in decision making.

Reading material:

- Pindyck and Rubinfeld (2009), Chapters 12 and 13.

Topic 5. Market failure

- Market failure and economic efficiency
- Externalities
- Public goods
- Asymmetric information

Learning objectives:

In contrast with a positive focus, in this chapter we deal with a more normative focus explaining when markets fail and public intervention is needed.

Reading material:

- Pindyck and Rubinfeld (2009), Chapters 16, 17 and 18.

SECTION 2. MACROECONOMICS

Topic 6: The labour market

6.1. Introduction to the labour market.

6.2. Wage determination.

6.3. Price determination.

6.4. The natural rate of unemployment.

Learning objectives:

- Know how wages and prices are determined in the economy in order to analyze equilibrium in the labour market and understand the natural rate of unemployment.

Reading material:

- Blanchard (2011), Chapter 6.

Topic 7: A macroeconomic model with flexible prices: the AS-AD model

7.1. Aggregate supply.

7.2. Aggregate demand.

7.3. Equilibrium in the short run and medium run.

7.4. Effects of economic policies and demand and supply shocks.

Learning objectives:

- Learn how the aggregate supply and aggregate demand functions are obtained and understand the dynamic effects of fiscal and monetary policies and supply shocks.

Reading material:

- Blanchard (2011), Chapter 7.

Topic 8: The natural rate of unemployment and the Phillips curve

8.1. Inflation, expected inflation and the Phillips curve.

8.2. The original Phillips curve.

8.3. the expectations-augmented Phillips curve

Learning objectives:

- Understand the aggregate supply curve as a relation between inflation, expected inflation and unemployment, and know how to use this relation in order to interpret movements in the Phillips curve over time.

Reading material:

- Blanchard (2011), Chapter 8.

Topic 9: Inflation, economic activity and nominal money growth

9.1. Output, unemployment and inflation.

9.2. The effects of money growth.

9.3. Disinflation.

Learning objectives:

- Know Okun's Law and understand the relation between economic growth, money growth and inflation.

Reading material:

- Blanchard (2011), Chapter 9.

Topic 10: Reflections on macroeconomic policy

10.1. Uncertainty and macroeconomic policy.

10.2. Expectations and macroeconomic policy.

10.3. The design of monetary policy.

10.4. Politics and macroeconomic policy.

Learning objectives:

- Understand how uncertainty conditions the role of macroeconomic policy and be aware of the limitations of fiscal and monetary policies.

Reading material:

- Blanchard (2011), Chapters 24 and 25.

6. Methodology and working plan

The teaching methodology includes:

Work requiring attendance

- Lectures. The basic material is presented and discussed and students are given guidance about the contents to be explained in the next lecture.
- Seminars (tutorial classes). Exercises related to the theoretical contents are solved. Issues complementary to the lectures are raised and real-world cases are discussed. The objective of these classes is for students to deepen their understanding of the material and develop their capacity to analyze and apply theoretical models.
- Group tutorial classes. Students doubts and questions are addressed and the exercises which have been proposed as homework are discussed. The monitoring tests will also be discussed. Material which complements the lectures and tutorial classes will be provided.

Work not requiring attendance

- Before the lectures, students should have read the material related to the contents which will be explained. The exercises to be discussed in tutorial classes or group tutorials must be done. Preparation should be made for the final exam.

The following table details the estimated number of hours destined to work requiring and not requiring attendance for each topic:

| <i>Lessons</i> | <i>Total Hours</i> | WORK REQUIRING ATTENDANCE | | | | | WORK NOT REQUIRING ATTENDANCE | |
|----------------|--------------------|----------------------------------|-----------------|------------------------|-----------------------------|--------------|--------------------------------------|--------------|
| | | <i>Lectures</i> | <i>Seminars</i> | <i>Group Tutorials</i> | <i>Evaluations Sessions</i> | <i>Total</i> | | Total |
| Topic 1 | 8.3 | 2.15 | 2.15 | 2.15 | 2.15 | 4.3 | 9 | 4 |
| Topic 2 | 9.3 | 2.15 | 2.15 | 2.15 | 2.15 | 5.3 | 4 | 4 |
| Topic 3 | 22.8 | 3.45 | 3.45 | 3.45 | 3.45 | 8.4 | 14.4 | 14.4 |
| Topic 4 | 30.1 | 4.3 | 4.3 | 4.3 | 4.3 | 9.6 | 20.5 | 20.5 |
| Topic 5 | 23.5 | 3.3 | 3.3 | 3.3 | 3.3 | 9.1 | 14.4 | 14.4 |
| Topic 6 | 18.7 | 2.15 | 2.15 | 2.15 | 2.15 | 4.3 | 14.4 | 14.4 |
| Topic 7 | 53 | 8.15 | 8.15 | 8.15 | 8.15 | 19.8 | 33.2 | 33.2 |
| Topic 8 | 20.4 | 3 | 3 | 3 | 3 | 6 | 14.4 | 14.4 |
| Topic 9 | 21.4 | 3 | 3 | 3 | 3 | 7 | 14.4 | 14.4 |

| | | | | | | | | |
|--------------------|-------------|-------------|-------------|----------|----------|-------------|-----|--------------|
| Topic 10 | 15.3 | 2.15 | 2.15 | 2.15 | 2.15 | 5.8 | 9.5 | 9.5 |
| Final exam | 2 | | | | | 2 | | |
| Total hours | 225 | 33.8 | 33.8 | 6 | 8 | 81.7 | | 143.3 |
| | | | | | | | | |

Teaching plan:

| Week | Work requiring attendance | Work not requiring attendance |
|-------------|---|--------------------------------------|
| | | |
| 1 | Topic 1: Firm production Topic 2: Firm costs | Lectures. |
| 2 | Topic 3: Perfect competition | Lectures and problem solving |
| 3 | Topic 3: Perfect competition Topic 4: Monopoly and monopsony | Lectures and problem solving |
| 4 | Topic 4: Monopoly and monopsony | Lectures and problem |

| | | |
|-----------|---|------------------------------|
| | | solving |
| 5 | Topic 4: Monopoly and monopsony Topic 5: Monopolistic competition and oligopoly | Lectures and problem solving |
| 6 | Topic 5: Monopolistic competition and oligopoly | Lectures and problem solving |
| 7 | Topic 6: The labour market | Lectures and problem solving |
| 8 | Topic 7: A macroeconomic model with flexible prices: AS-AD | Lectures and problem solving |
| 9 | Topic 7: A macroeconomic model with flexible prices: AS-AD | Lectures and problem solving |
| 10 | Topic 7: A macroeconomic model with flexible prices: AS-AD | Lectures and problem solving |
| 11 | Topic 7: A macroeconomic model with flexible prices: AS-AD Topic 8: Inflation and unemployment: the Phillips Curve | Lectures and problem solving |
| 12 | Topic 8: Inflation and unemployment: the Phillips Curve | Lectures and problem solving |
| 13 | Topic 9: Inflation, economic activity and nominal money growth | Lectures and problem solving |
| 14 | Topic 9: Inflation, economic activity and nominal money growth Topic 10: Reflections on macroeconomic policy | Lectures and problem solving |
| 15 | Topic 10: Reflections on macroeconomic policy | Lectures and problem solving |

7. Assessment.

The evaluation of the subject consists of two parts: continuous assessment and final exam.

- *Continuous assessment.* This will consist of four monitoring tests in which students will be examined on the contents covered up to the date of the test. In each test, students can obtain a maximum of 0.75 points. A further 1 point can be achieved on the basis of criteria established by the lecturer (exercises, participation in class, etc.).
- *Final exam.* This will cover theoretical questions and concrete problems. A maximum of 6 points can be obtained.

The *final grade* in the subject will be the sum of the points obtained in continuous assessment and the final exam, where continuous evaluation accounts for 40% of the final grade and the final exam 60%.

In extraordinary examinations, the points obtained from continuous assessment will be maintained. The monitoring tests cannot be repeated.

7. Evaluation of the student's learning results

8. Resources, bibliography and complementary documentation

Basic Bibliography

Blanchard, O., Amighini, A. and Giavazzi, F. (2013), *Macroeconomics: A European Perspective*, Pearson Second Edition.

Pindyck, R.S. and Rubinfeld, D.L. Frank, R. (2013), *Microeconomics* (8th edition). Pearson International Edition.

Complementary Bibliography

Colander, D.C. (2010), *Microeconomics* (8th edition). McGraw-Hill.

Colander, D.C. (2010), *Macroeconomics* (8th edition). McGraw-Hill.

Frank, R. (2010), *Microeconomics and Behavior* (8th edition), McGraw-Hill.

Sloman, J. and Wride, A. (2009), *Economics* (7th edition), Prentice Hall.

In Spanish:

Belzunegui. B.; Cabrerizo. J.; Padilla. R. y Valero. I. (2013): *Macroeconomía: Cuestiones y ejercicios*. Prentice-Hall, 3ª ed., Madrid.

Carrasco. A y De la Iglesia. C (2010): *Microeconomía intermedia. Problemas y cuestiones*. McGraw-Hill, Madrid.

Subject Guide

1. Information about the subject

| | | | | |
|-------------------------------|---|-------------------------|--|----------------|
| SUBJECT | Fundamentos de Marketing/Fundamentals of Marketing | | CODE | GADEMP01-2-005 |
| EDUCATIONAL OFFER | Graduado o Graduada en Administración y Dirección de Empresas Degree in Business Administration and Management | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | Nº TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
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2. Context

Fundamentals of Marketing (English subject for Fundamentos de Marketing) is a compulsory subject scheduled in the second semester of the second year of the Degree in Business Administration at Universidad de Oviedo. It is the first subject within the “Marketing” module, linked to Matter Nr. 1: Fundamental Aspects of Marketing.

The subject presents the basic Marketing contents for a Bachelor in Business Administration. Understanding the market is a key piece in business strategy when it comes to get sales and attract and retain loyal customers. Competitive depends largely on the knowledge thereof, on the ability to understand the purchase decision

processes and the ability to develop marketing strategies that respond to market expectations. The subject takes into account the key role of market orientation, the peculiarities of different markets and sectors, the need to analyse the environment and learn about consumer behaviour, as well as segmenting, positioning and all the decisions needed to attract and retain customers.

For such an introductory subject, the aim is to combine the conceptual development of the basic theoretical principles with an applied perspective taking the entrepreneurial skills of the students into the process.

Fundamentals of Marketing is further developed by the compulsory subjects Dirección Comercial (Third Year, 1st semester), Investigación de Mercados (Third Year, 2nd semester). Additionally, those students and students wishing to strengthen their Marketing abilities, will be able to course two elective subjects in their Fourth Year (Distribución Comercial y Comercio Electrónico (1st semester) and Comunicación Comercial (2nd semester).

3. Requirements

There are no specific prerequisites beyond those in relation to the position of the subject on the second semester of the second academic year, as stated by the syllabus of the Degree in Business Administration. Specifically, the student would benefit from the understanding of the concepts explained in the First Year subjects “Introduction to Business” and “Introductory Microeconomics”.

The following competencies are desirable as well:

1. Ability for analysis and decision taking for the proposed cases.
2. Ability for teamwork and entrepreneurial skills.
3. Ability to search and access to different sources of information.
4. Ability to make oral presentations using the basic tools.

4. Competencies and learning results

The main purpose of Fundamentals Marketing is to introduce the basics of Marketing so that the student is able to apply them. Specifically, this means:

- a. Learning about the role of marketing in the company and in its relations with the environment.
- b. Learning methods and techniques of management and organization of the commercial strategy of the company.

This results in the following generic and specific competencies, as well as the following learning results:

General competencies

- Ability for analysis and synthesis.
- Ability to search and analyze information sources in the work environment.
- Ability to employ software and information technologies.
- Ability for teamwork.
- Critical reasoning.
- Decision-making.
- Ability to put theory in practice.
- Creativity.

- Initiative and entrepreneurship.
- Ability to organize and planning.
- Adaptability to changing environments.
- Ethic commitment.
- To integrate the equality of rights and opportunities between men and women at the work environment.
- Integration of equal opportunities and universal accessibility to disabled people in the work environment.

Specific competencies

- Marketing planning: understanding concepts and procedures of both strategic and operational Marketing.
- Developing a business project.
- Transmitting information, ideas, problems and solutions in the field of Business management to both specialized as non-specialized audiences.
- Issuing reports with advice on specific situations of companies and markets.

Learning Results:

- To understand the role of Marketing in different markets.
- To do a SWOT analysis.

- To design segmentation and positioning strategies.

5. Contents

5.1 Abbreviated contents

PART I. INTRODUCTION TO MARKETING

Lesson 1.-Marketing scope

PART II. ENVIRONMENT, MARKET AND CONSUMERS

Lesson 2.-Marketing environment and relevant market

Lesson 3.- Purchase behaviour in consumer and business markets

Lesson 4.- Market Segmentation

Lesson 5.- Market Research

PART III. MARKETING STRATEGY

Lesson 6.-Design of Strategies of Marketing

Basic references:

Kotler, P.; Armstrong, G.; Wong, V. and Saunders, J. (2013): Principles of Marketing, sixth European edition. Pearson Education Limited.

Cravens, D.W. and Piercy, N.F. (2009): Strategic Marketing, ninth international edition. Mc-Graw Hill.

5.2. Comprehensive contents

Lesson 1.-Marketing scope

1. Marketing as exchange.
2. Strategic Marketing and Operational Marketing.
3. Latest Marketing trends
4. The Marketing Plan

General learning targets

Lesson 1 is an introductory one. It starts with a definition of Marketing built on the different types of exchange where Marketing is useful. The relationship between Management and Marketing is then outlined, with a reference to the distinction of Strategic Marketing and Operational Marketing.

The latest Marketing trends are then referenced and the Lesson ends with a detailed explanation of the Marketing Plan.

Difficulties for students: the main difficulty will be that related to any new subject, specially for the first subject of a given matter within a degree.

Specific learning targets:

1. Define and learn the following concepts:

- Marketing
- Exchange
- Market Orientation
- Strategic Marketing and Operational Marketing
- Relationship Marketing. CRM
- E-Marketing.
- Marketing and Social Corporate Responsibility
- The plan of Marketing

Basic references

Kotler, P.; Armstrong, G.; Wong, V. and Saunders, J. (2013): Principles of Marketing, sixth European edition. Pearson Education Limited. Chapters one and three.

Lesson 2.- Marketing environment and relevant market

1. The marketing environment.
2. Markets: definition and classification.
3. Business markets.
4. Services markets.

General learning targets

Lesson 2 deals with the analysis of the environment and the relevant market for the company.. Specifically, an overview of the factors that make up the environment organizations is provided, followed by the criteria needed to correctly define the relevant market for a company, avoiding Marketing myopia situations. The different typologies of markets are central to the last part of the lesson, pointing out the differences between (1) consumer, (2) business and (3) services markets.

Difficulties for students: need for thinking out of the box when putting market orientation in practice and acknowledging the diversity of environment actors and forces influencing companies.

Specific learning targets:

1. Define and learn the following concepts:

- Microenvironment vs Macroenvironment: SWOT analysis.
- Market – Customer - Need
- Competition
- Product – market
- Consumer market

- Business market
- Services market

2. To analyze a company's environment and evaluate its influence using a SWOT analysis.

3. To identify and compare different markets and their characteristics.

Basic references

Kotler, P.; Armstrong, G.; Wong, V. and Saunders, J. (2013): Principles of Marketing, sixth European edition. Pearson Education Limited. Chapters four, five and six.

Lesson 3.- Purchase behaviour in consumer and business markets

1. Purchase behaviour: scope, characteristics and links.
2. Types of purchases and consumer behaviour processes.
3. Purchase behaviour factors.
4. Purchase behaviour in business markets.

General learning targets

Once the student is able to define the relevant market for the company, the next step will be to provide basic guidelines enabling him/her to carry out an analysis of the purchase behavior of customer in this market. Specifically, the characteristics of the purchase behaviour will be explained, both for consumer and business markets. Then, attention will be brought to the factors influencing the purchase behaviour, the stages of the purchase process as well as the roles in the process and the main types of purchase decisions.

Difficulties for students: Main difficulty will be to deal with the complexity of the purchasing process, the need to effectively anticipate consumer reactions, as well as being aware of the large number of variables that simultaneously influence purchase behavior.

Specific learning objectives:

1. Define and to know the concepts of:

- Consumer behaviour
- Internal variables that affect the purchase behaviour: motivations, perceptions, learning and experience, demographic and socio-economic characteristics, personality, lifestyles, attitudes.
- External variables that affect the behavior: cultural values, social class, social groups, family, leaders of opinion, purchase and consumption situations.
- Types of behaviors: complex, reducing dissonance, search for variety, usual

2 Analyze and distinguish different types of purchase behaviors according to the different roles involved in the purchase process as well as consumer's involvement.

Basic references

Kotler, P.; Armstrong, G.; Wong, V. and Saunders, J. (2013): Principles of Marketing, sixth European edition. Pearson Education Limited. Chapters five and six.

Lesson 4.- Market Segmentation

1. Segmentation from a strategic point of view.
2. Segmentation criteria. Evaluating and selecting market segments.
3. Market coverage strategies.
4. Segmenting and positioning.

General learning targets

Market fragmentation is one of the most significant trends for the last decades. Therefore, students must be aware of the need for market segmentation and thus identifying groups of customers with different behaviours to which an specific offer is suitable. This fourth lesson deals with market segmentation, whose importance will be justified and the requirements for a successful segmentation will be explained. Also, several strategies related to the segmentation concept and the attractiveness of a market or a market segment will be detailed.

Difficulties for students: the practical implementation of the segmentation strategy, both in terms of identifying the relevant market segments (analytical problem) and how to determine the ideal coverage strategy (reflection and creativity).

Specific learning objectives:

1. Define and to know the concepts of:

- Market segmentation
 - One-to-one marketing
 - Criteria or segmentation variables
 - Attractiveness of the market: resources and capacity, demand and competitive structure.
 - Coverage strategies: concentrated, differentiated and undifferentiated
 - Positioning
2. To identify the market segments and describing their profiles..
 3. To analyze the attractiveness of the segments, evaluating and estimating the demand, and analyzed the competitive structure of the company.
 - 4 Devise strategies of market coverage.

Basic references

Kotler, P.; Armstrong, G.; Wong, V. and Saunders, J. (2013): Principles of Marketing, sixth European edition. Pearson Education Limited. Chapter nine.

Lesson 5.- Market Research

1. Marketing Information System.
2. Market Research: defining the problem and research objectives.
3. Information sources

4. Developing the research plan.

General learning targets

Lesson five deals with the importance to have an adequate Marketing Information System, on which to base decision taking. Lesson begins with a description of the four subsystems in an Information Marketing System: internal data, Marketing Intelligence, market research and support. Focus is then shifted to the characteristics, objectives and market research applications. The final part of the lesson develops a methodology for market research. All this concepts will be dealt with in an introductory manner, for an also compulsory subject (Investigación de Mercados) in the third year of the Degree deepens on all the aforementioned concepts.

Difficulties for students: The introductory character of the lesson may lead to a superficial and somewhat abstract understanding of the explained concepts.

Specific learning objectives:

1. Define and to know the concepts of:
 - Marketing information system (SIM)
 - Market research
 - Information sources: internal, external, ad-hoc, published
2. To identify potential sources of information for market research
- 3 Get a first approach to the planning of market research

Basic references

Kotler, P.; Armstrong, G.; Wong, V. and Saunders, J. (2013): Principles of Marketing, sixth European edition. Pearson Education Limited. Chapter seven

Lesson 6.-Design of Strategies of Marketing

1. Competitive Strategy
2. Defining and Analyzing Product-Markets.
3. Strategy for future growth
4. The product-portfolio perspective.

General learning targets

Lesson six deepens in the strategy concept from the Resources Theory framework I. Marketing strategies will be explained with the goods and services, markets and positioning dimensions as a reference. To end the lesson, strategies for future growth are also explained.

Difficulties for students: main difficulty will be to isolate the strategic part of Marketing from other strategic issues at the corporate or firm level, specially those related to the field of Management of Strategic Management.

Specific learning objectives:

1. Define and to know the concepts of:

- Objective, goal and strategy
- Product - market strategy
- Strategy for future growth
- The product-portfolio perspective

2 Designing the marketing strategies in a practical way.

Basic references:

Kotler, P.; Armstrong, G.; Wong, V. and Saunders, J. (2013): Principles of Marketing, sixth European edition. Pearson Education Limited. Chapters nine and ten.

Cravens, D.W. and Piercy, N.F. (2009): Strategic Marketing, ninth international edition. Mc-Graw Hill. Chapter two.

6. Methodology and working plan**6. Methodology and Teaching Plan****6.1. Methodology**

The teaching methodology to be followed in the subject will combine both in class and out of class activities.

1. In class activities

a. Lectures will be used to explain and develop the theoretical foundations of Strategic Marketing. Slide presentations, as well as IT will be used as support.

b. Seminars. Presentation and oral discussion by the students of applied cases, news and readings. Cases would be introduced by the teaching staff in advance so that it can be prepared according to a list of questions and keypoints. Students must do the preparation and presentation organising in teams and with the support of a slide presentation. Participation and critical reasoning will be encouraged.

c. Group Tutorials are meetings with students which will be used to supervise and guide the realization of an out of class assignment consisting in developing a Marketing Plan for a company. This assignment will be undertaken in group. During these Group Tutorials, every group will present orally their progress and participation and critical reasoning will be encouraged.

2. Out of class activities

a. Autonomous work. Student work devoted both to the resolution of the case studies for its oral presentation during seminars and to the preparation for the final exam.

b. Team work corresponds with the out of class assignment consisting of developing a Marketing Plan for a company.

6.2. Teaching Plan

1. Chronogram

| WEEK | IN CLASS | OUT OF CLASS |
|------|---|--|
| 1 | Introducing the Subject Lecture (I). Lesson 1 (I) Lecture (II). Lesson 1 (and II) | Autonomous learning Lesson 1 Work in group Lesson 1 |
| 2 | Lecture. Lesson 2 (I) Seminars Cases for Lesson 1 Group tutorial 1 | Autonomous learning Lesson 2 Work in group Lesson 2 |
| 3 | Lecture. Lesson 2 (II) Seminars Cases for Lesson 2 | Autonomous learning Lesson 2 Work in group Lesson 2 |
| 4 | Lecture. Lesson 2 (and III) Seminars Cases for Lesson 2 | Autonomous learning Lesson 2 Work in group Lesson 2 |
| 5 | Lecture. Lesson 3 (I) Seminars Cases for Lesson 2 Group tutorial 2 | Autonomous learning Lesson 3 Work in group Lesson 3 |
| 6 | Lecture. Lesson 3 (II) Seminars Cases for Lesson 3 | Autonomous learning Lesson 3 Work in group Lesson 3 |

| | | |
|----|--|--|
| 7 | Lecture. Lesson 3 (and III) Seminars Cases for Lesson 3 | Autonomous learning Lesson 3 Work in group Lesson 3 |
| 8 | Lecture. Lesson 4 (I) Seminars Cases for Lesson 3 | Autonomous learning Lesson 4 Work in group Lesson 4 |
| 9 | Lecture. Lesson 4 (II) Seminars Cases for Lesson 4 | Autonomous learning Lesson 4 Work in group Lesson 4 |
| 10 | Lecture. Lesson 4 (III) Seminars Cases for Lesson 4 Group tutorial 3 | Autonomous learning Lesson 4 Work in group Lesson 4 |
| 11 | Lecture. Lesson 4 (and IV) Seminars Cases for Lesson 4 | Autonomous learning Lesson 4 Work in group Lesson 4 |
| 12 | Lecture. Lesson 5 (I) Seminars Cases for Lesson 4 | Autonomous learning Lesson 5 Work in group Lesson 5 |
| 13 | Lecture. Lesson 6 (I) Seminars Cases for Lesson 5 Group tutorial 4 | Autonomous learning Lesson 6 Work in group Lesson 6 |

| | | |
|----|---|--|
| 14 | Lecture. Lesson 6 (and II) Seminars Cases for Lesson 6 | Autonomous learning Lesson 6 Work in group Lesson 6 |
| 15 | Final Exam | |

2. Hour distribution by types of activity

| | | IN CLASS | | | | OUT of CLASS | | |
|----------------|------------------------------|-----------------|-----------------|------------------------|--------------|------------------|------------------------|--------------|
| <i>Lessons</i> | <i>Total Number of hours</i> | <i>Lectures</i> | <i>Seminars</i> | <i>Grout tutorials</i> | <i>Total</i> | <i>Team Work</i> | <i>Autonomous work</i> | <i>Total</i> |
| Lesson 1 | 14,5 | 3 | 1,5 | | 4,5 | | 10 | 10 |
| Lesson 2 | 30 | 4,5 | 4,5 | 1 | 10 | 10 | 10 | 20 |
| Lesson 3 | 30 | 4,5 | 4,5 | 1 | 10 | 10 | 10 | 20 |
| Lesson 4 | 38 | 6 | 6 | 1 | 13 | 10 | 15 | 25 |

| | | | | | | | | |
|--------------|------------|-----------|-----------|----------|-----------|-------------|-------------|-----------|
| Lesson 5 | 11 | 1,5 | 1,5 | 1 | 4 | 2,5 | 4,5 | 7 |
| Lesson 6 | 19,5 | 3 | 1,5 | | 4,5 | 5 | 10 | 15 |
| Assessment | 7 | 5,5 | 1,5 | | 7 | | | |
| Total | 150 | 28 | 21 | 4 | 53 | 37,5 | 59,5 | 97 |

3. Activity distribution by number (and %) of hours

| MODALIDADES | | Horas | % | Totales |
|--------------|-----------------|-------|------|---------------|
| In Class | Lectures | 28 | 18,7 | 53 (35,3%) |
| | Seminars | 21 | 14,0 | |
| | Group tutorials | 4 | 2,7 | |
| Out of Class | Team Work | 37,5 | 25,0 | 97 (64,7%) |
| | Individual Work | 59,5 | 39,6 | |
| Total | | 150 | | |

7. Evaluation of the student's learning results

Student assessment will be done in the following manner:

1. Continuous Assessment. 4 points maximum (40% of the final mark). It will be done through two activities:

1.1. Solving and presenting applied cases, news and other readings related to Strategic Marketing. This assignment will be undertaken in group and presentations will take place during the seminar hours in which groups will present their results, and participation and critical thinking would be encouraged and taken into account.

1.2. Development of a Marketing Plan on a business proposition, with emphasis on the Strategic Marketing concepts. This assignment will be tutored during the four Group Tutorials, in which groups will orally present the progress of their work. At the end of the lecturing period (specifically: on the last Group Tutorial, or the last day of class), a printed copy will be presented.

2. Final Exam. **6 points maximum** (60% of the final mark).

In summary:

| Assessment | Weight in the Final Mark (Points and %) |
|-----------------------|--|
| Continuous assessment | 4 points (40%) |
| Final Exam | 6 points (60%) |

Students need to obtain a minimum mark of 2 points in the Final Exam (out of the 6 which is the perfect score for the exam) to qualify for a pass. Continuous

Assessment will not be considered with a mark in the Final Exam below 2 points.

For all the examination periods (May, July), final mark would be calculated as the weighed mean of the marks obtained both in the continuous assessment during the lecturing period (40%) and the final exam (60%). Continuous assessment marks, as obtained during lecturing period, will be saved and valid for the July exam opportunity.

System of Differential Evaluation

For those students following the Degree in Business Administration in a part-time schedule which have been granted the right to differential evaluation, evaluation will be held in the following manner: The same final exam will account for 60% of the final mark. An additional practical exam will account for the remaining 40% and it will evaluate the ability of the student to apply the theoretical foundations of the subject. This second part of the exam will take place the same day of the theoretical exam.

8. Resources, bibliography and complementary documentation

Main subject resources, such as this course guide, slides with presentations used during lectures, as well as the applied cases and guidelines for the assignment will be put at students disposal through the Virtual Campus at Universidad de Oviedo

(<https://www.innova.uniovi.es/servicios/campusvirtual>)

or similar.

Other important references and interesting readings are listed below:

Basic references

Kotler, P.; Armstrong, G.; Wong, V. and Saunders, J. (2008): Principles of Marketing, fifth European edition. Pearson Education Limited.

Cravens, D.W. and Piercy, N.F. (2009): Strategic Marketing, ninth international edition. Mc-Graw Hill.

Additional references

Bagozzi, R.P. (1975): "Marketing as Exchange". Journal of Marketing, 39 (4), pp. 32-39.

Berry, L.L. (1983): "Relationship Marketing", en Berry, L.L.; Shostack, G.L. y Upah, G. (eds.): Emerging Perspectives on Services Marketing, American Marketing Association, Chicago, pp. 25-28.

Bonoma, T.V. y Johnston, W.J. (1978): "The Social Psychology of Industrial Buying and Selling". Industrial Marketing Management, 17, pp. 213-224.

Borden, N. H. (1964): "The Concept of the Marketing Mix", Journal of Advertising Research, vol. 4, junio, pp. 2-7.

Brown, H. I. (1996): "Art or Science?: Fifty Years of Marketing Debate", Journal of Marketing Management, vol. 12, octubre, pp. 50-55.

Copeland, M. (1923): "The Relation of Consumers` Buying Habits to Marketing Methods". Harvard Business Review, 1 (2), pp. 282-284.

Grönroos, C. (1989): "Defining Marketing: A Market-Oriented Approach". European Journal of Marketing, 23 (1), pp. 52-60.

Grönroos, C. (1995): "Relationship Marketing: The Strategy Continuum". Journal of the Academy of Marketing Science, 23 (4), pp. 252-254.

Howard, J.A. (1983): "Marketing Theory of the Firm". Journal of Marketing, 47 (4), pp. 90-100.

Hunt, S.D. (1976): "The Nature and Scope of Marketing". Journal of Marketing, 40 (3), pp. 17-28.

Kaish, S.(1967): "Cognitive Dissonance and the Classification of Consumer Goods". Journal of Marketing, 31 (2), pp. 28-31.

Kotler, P. (1972): "A Generic Concept of Marketing". Journal of Marketing, 36 (2), pp. 46-54.

Levitt, T. (1960): "Marketing Myopia". Harvard Business Review, 43 (6), pp. 81-94.

Priem, R.L. (1992): "Industrial Organization Economics and Alderson`s General Theory of Marketing". Journal of the Academy of Marketing Science, 20 (4), pp. 135-142.

Sheth, J.N. (1973): "A Model of Industrial Buyer Behaviour". Journal of Marketing, 37 (4), pp. 50-56.

Smith, W. R. (1956): "Product Differentiation an Market Segmentation as Alternative Marketing Strategies", Journal of Marketing, vol. 21, julio, pp. 3-8.

Webster, F.E. y Wind, Y. (1972): "A General Model for Understanding Organizational Buying Behavior". Journal of Marketing, 36 (2), pp. 12-19.

Websites (not only in English)

- American Marketing Association: www.marketingpower.com
- Asociación Española de Estudios de Mercado, Marketing y Opinión: www.aedemo.es
- Asociación Española de Marketing Académico y Profesional: www.aemark.es
- Cátedra Fundación Ramón Areces de Distribución Comercial: <http://catedrafundacionarecesdc.uniovi.es>
- European Marketing Association: www.emac-online.org
- Harvard Deusto Marketing&Ventas: <http://www2.e-deusto.com/cdrevistasw/hdmv.htm>
- Ipmark: www.ipmark.com
- Kotler Marketing Group: <http://www.kotlermarketing.com/>
- Marketing directo: www.marketingdirecto.com
- Marketing news: <http://www.marketingnews.es>
- Marketing Science Institute: www.msi.org
- Puro marketing: www.puromarketing.com
- Revista Emprendedores: <http://www.emprendedores.es>
- Ries & Ries: <http://www.ries.com/>
- Working Knowledge-Harvard Business School: <http://hbswk.hbs.edu/topics/marketing.html>

Subject Guide

1. Information about the subject

| | | | | |
|------------------------------|---|-------------------------|--|----------------|
| SUBJECT | Finanzas Empresariales/Corporate Finances | | CODE | GADEMP01-2-006 |
| EDUCATIONAL OFFER | Graduado o Graduada en Administración y Dirección de Empresas Degree in Business Administration and Management | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | Nº TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| LECTURERS | | EMAIL | | |
| MENENDEZ REQUEJO SUSANA | | srequejo@uniovi.es | | |
| ARRONDO GARCIA RUBEN | | rarrondo@uniovi.es | | |
| GONZALEZ RODRIGUEZ FRANCISCO | | fgonzale@uniovi.es | | |
| GASCON GARCIA-OCHOA FERNANDO | | fgascon@uniovi.es | | |

2. Context

Corporate Finance is one of the three compulsory subjects of the **Finance** module of the Degree in Business Administration. It is also the first subject related to Finance that students must study, and it provides fundamental knowledge, as it provides students with the basic tools to make investment decisions, financing and distribution of dividends in business.

This subject is coordinated with the other subjects of the Finance module and multiple interactions exist among them. Thus, Markets and Financial Institutions (compulsory subject of the 1st semester of third year) analyzes the different agents, markets and financial system assets, which constitute the financial environment in which firms make their financial decisions. The subject Financial Investments (compulsory subject of the 2nd semester of third year) shows the different methods of valuation of equity, debt and financial derivatives in the context of portfolio management. All these aspects are related to the design of investment and financing policies. In addition, Corporate Finance is also related to other Finance elective modules (Financial Risk Management and Financial Analysis and Planning) to develop in depth issues related to financial management of enterprises.

3. Requirements

There are no mandatory requirements to take this subject but it is considered appropriate to be able to master the content of the subject Business Economics, first-year

core subject in the Degree in Business Administration, as this subject gives the student an overview of the company, presenting the different functional areas and their interrelationships. On the other hand, it is advisable to have knowledge of the financial information prepared by the company as well as knowledge of financial mathematics. Also, as an instrumental aid, it is recommended some training in the management of basic computer programs, internet, as it facilitates reference consultation, organization, processing and presentation of information to be managed by students.

4. Competencies and learning results

The aim of this subject is the study of investment decisions, financing and dividend distribution policy, adopted by companies given the financial objective of creating value in the company. This means knowing not only the variables that characterize investment projects, and possible funding sources or dividends, but also taking into account the influence of those decisions on issues such as the institutional environment, ownership structure of companies, incentives or informational asymmetries. The key criterion in making financial decisions will be to maximize value creation in the company, considering relevant conflicts of interest that may exist between different groups of stakeholders with interests in the company. Thus, the valuation carried out by financial markets will be the reference indicator used to assess the choice of each investment, financing and dividend policy decisions.

Generic skillsthe student acquires in the subject Corporate Finance are:

- Ability to analyse and synthesize
- Learning ability
- Ability to communicate (orally and written) fluently in the English language
- Knowledge and understanding of other languages, mainly Spanish
- Ability to search for and analyze information sources in the workplace
- Ability to work as a team
- Ability to make decisions
- Ability to apply knowledge to practice
- Ability to find creative new ideas and solutions
- Initiative and entrepreneurial spirit

- Ability to organize and plan
- Ability to adapt to new situations
- Concern for quality and a well done job
- Values and ethical behaviour

Specific skills a student will acquire in the Corporate Finance subject:

- Manage and interpret specific software for data processing
- Assess the suitability of investment projects and the most appropriate funding
- Design, develop and analyze business plans
- Transfer information, ideas, problems and solutions in the field of business management to an audience both skilled and unskilled
- Issue advisory reports on specific situations of companies and markets

Learning Outcomes. At the end of the module the student should be able to:

- Identify the relevant parameters for the valuation of assets.
- Estimate the NPV (Net Present Value) and be able to calculate the profitability of business investment projects.
- Identify the determinants of corporate financing decision.
- Plan the dividend distribution policy.
- Calculate the cost of different funding sources and estimate the cost of capital of the company.

- Understand the financial decision-making by economic agents.

In short, this subject not only provides a specialized training in business and financial aspects and the basis for understanding other Finance related subjects, but it also promotes employment in a professional career connected to the financial decisions in the company and interaction with financial markets. The ultimate goal of the present subject is for students to reach their jobs in the best conditions to make contributions that will improve corporate financial performance.

5. Contents

The course guide is divided into 7 chapters grouped into three parts. A first introductory chapter is aimed at defining the objective to pursue in making financial decisions. The second part includes chapters 2 to 4 and it is focused on the analysis of investment decision. Finally, the third part includes chapters 5 to 7, and it is devoted to analyzing financing decisions and dividend payments, together with the estimation of the opportunity cost of capital.

5.1. Abbreviated Program:

Part I: Introduction

Chapter 1. The finance function

Part II: The investment decision

Chapter 2. Information to evaluate investment projects

Chapter 3. Investment valuation methods

Chapter 4. The risk and uncertainty in the investment decision

Part III: Capital Structure and Financial Policies

Chapter 5. The capital structure decision

Chapter 6. The dividend decision

Chapter 7. The cost of capital

5.2. Detailed program and learning objectives

Chapter 1 .- THE FINANCE FUNCTION

-
-
- 1.1. Financial Theory
 - 1.2. Theoretical foundations of financial economics
 - 1.3. The financial goal of the company
 - 1.4. The company's financial management
-
-

This chapter tries to identify the firm's financial decisions, evaluate their importance in the business environment and define the objective in terms of value creation in the company. It will assess the potential influence of conflicts of interest, especially regarding the relationship between managers and shareholders. In addition, it sets forth the theoretical foundations of financial economics, which are then developed in the subject.

Objectives:

- Know the purpose and the specific duties of the Financial Management of the company.
- Understand the Value Creation as both the corporate objective and the financial objective.
- Identify the firm's financial decisions.
- Understand the theoretical foundations of financial economics.
- Understand the importance of the conflict of interest between shareholders and managers in making financial decisions.

Bibliography:

- BREALEY, R.; MYERS, S.; ALLEN, F. (2011): *Principles of Corporate Finance*. Ed. McGraw Hill. Tenth edition (Chapter 1 and and Chapter 2 – Section 2.3).
- BREALEY, R.; MYERS, S.; MARCUS, A. (2009): *Fundamentals of Corporate Finance*, 6/e. Ed. McGraw Hill. (Part One: Introduction).
- ROSS, S.A.; WESTERFIELD, R.W. & JORDAN, B.D. (2010): *Fundamentals of Corporate Finance*, 9/e. Ed. McGraw-Hill (Chapter 1).

Chapter 2 - INFORMATION TO EVALUATE INVESTMENT PROJECTS

- 2.1. Allocation of resources between consumption and investment
 - 2.2. Financial dimension of productive investment
 - 2.3. Estimating cash flows
 - 2.4. The cost of capital in the investment decision
-
-

This chapter deals with investment decisions based on review of the balanced relationship between consumption and investment and the criteria for the allocation of financial resources over time. It also shows the variables needed to analyze the investment decision, such as the estimated cash flows and payments and the opportunity cost of capital as a minimum return that must provide the entire investment project.

Objectives:

- Analyze investment decisions based on review of the balanced relationship between consumption and investment.
- Define the variables and data that define an investment project.
- Estimate the cash flows of an investment project

- Understand the importance of the opportunity cost of capital for making investment decisions.

Bibliography:

BREALEY, R.; MYERS, S.; ALLEN, F. (2011): *Principles of Corporate Finance*. Ed. McGraw Hill. Tenth edition (Chapters 2 & 3).

BREALEY, R.; MYERS, S.; MARCUS, A. (2009): *Fundamentals of Corporate Finance*, 6/e. Ed. McGraw Hill. (Chapters 5 & 6).

ROSS, S.A.; WESTERFIELD, R.W. & JORDAN, B.D. (2010): *Fundamentals of Corporate Finance*, 9/e. Ed. McGraw-Hill (Chapters 2 & 3).

Chapter 3.- INVESTMENT VALUATION METHODS

- 3.1. Approximate criteria for assessing investment projects
- 3.2. Traditional criteria of evaluation of investment projects
- 3.3. Relationship between the criteria of net present value and internal rate of return
- 3.4. Abandonment of some restrictive assumptions
- 3.5. Investment selection with limited resources

The aim of this chapter is the study of the fundamental criteria to evaluate investment projects under certainty. We study the criteria of net present value (NPV) and internal rate of return (IRR), analyzing in detail when both criteria are or are not equivalent in terms of selection and prioritization of investment projects. Emphasis is placed on the evaluation of heterogeneous projects, in particular, comparing projects of different duration and appropriate time decision for the renewal of productive assets. It analyzes the influence of inflation and the term structure of interest rates on the investment decision.

Objectives:

- Know the methodologies to properly evaluate investment projects under certainty.
- Know the type of decision criteria that should be followed.
- Assess the contribution to the creation of enterprise value of investment projects.
- Correctly estimate the NPV and IRR of conventional and unconventional investment projects (both independent and mutually exclusive).
- Understand the similarities and differences between the dynamic criteria to evaluate investment projects.

Bibliography:

BREALEY, R.; MYERS, S.; ALLEN, F. (2011): *Principles of Corporate Finance*. Ed. McGraw Hill. Tenth edition (Chapters 5 & 6).

BREALEY, R.; MYERS, S.; MARCUS, A. (2009): *Fundamentals of Corporate Finance*, 6/e. Ed. McGraw Hill. (Chapters 8, 9 & 10).

ROSS, S.A.; WESTERFIELD, R.W. & JORDAN, B.D. (2010): *Fundamentals of Corporate Finance*, 9/e. Ed. McGraw-Hill (Chapters 5, 6 & 9).

Chapter 4 .- THE RISK AND UNCERTAINTY IN THE INVESTMENT DECISION

-
-
- 4.1. Uncertainty and risk in selecting investment projects
 - 4.2. Information required for the evaluation of investment projects at risk
 - 4.3. Selection methods at risk
 - 4.4. Sensitivity analysis of investment decisions
 - 4.5. Evaluation of investments under uncertainty
-
-

This chapter deals with appropriate methodologies to evaluate investment projects under conditions of risk and uncertainty. It also analyzes the sensitivity analysis to assess the suitability of investment projects, depending on variations in the concepts that determine the net value of a project.

Objectives

- Analyze decision making in situations of risk and uncertainty.
- Identify the elements and characteristics that define the investment projects under uncertainty.
- Know and apply the methodologies to evaluate investment projects when they are developed in contexts of risk.
- Use sensitivity analysis to analyze the influence of the estimates on the investment decision.
- Analyze investment decision making under uncertainty.

Bibliography:

BREALEY, R.; MYERS, S.; ALLEN, F. (2011): *Principles of Corporate Finance*. Ed. McGraw Hill. Tenth edition (Chapters 5, 6 & 7).

BREALEY, R.; MYERS, S.; MARCUS, A. (2009): *Fundamentals of Corporate Finance*, 6/e. Ed. McGraw Hill. (Chapter 11).

ROSS, S.A.; WESTERFIELD, R.W. & JORDAN, B.D. (2010): *Fundamentals of Corporate Finance*, 9/e. Ed. McGraw-Hill (Chapters 10 & 11).

Chapter 5.- THE CAPITAL STRUCTURE DECISION

- 5.1. The capital structure in perfect capital markets
 - 5.2. The effect of taxes
 - 5.3. The effect of asymmetries and agency costs
 - 5.4 The effect of insolvency costs
 - 5.5. Financial flexibility. Operating and financial leverage
-
-

This chapter analyzes the determinants of capital structure or company funding. Based on the classical theory of irrelevance of the debt decision, set forth by Miller and Modigliani, we study the influence that market imperfections (such as taxes, bankruptcy costs, information asymmetries and conflicts of interest) have on the capital

structure and their influence on the value of the Company. It also deals with the analysis of alternative financing of the company by analyzing its effect on profitability and risk.

Objectives:

- Analyze the relationship between capital structure and firm value.
- Understand the assumption of irrelevance of capital structure in the context of perfect capital markets.
- Know the market imperfections that cause the relevance of capital structure.
- Identify the implications of trade-off theory and the hierarchy of preferences for the decision of corporate debt.
- Analyze the effect of funding on the profitability and business risk.
- Recognize and analyze the determinants of corporate borrowing decision.

Bibliography:

BREALEY, R.; MYERS, S.; ALLEN, F. (2011): *Principles of Corporate Finance*. Ed. McGraw Hill. Tenth edition (Chapters 17 & 18).

BREALEY, R.; MYERS, S.; MARCUS, A. (2009): *Fundamentals of Corporate Finance*, 6/e. Ed. McGraw Hill. (Chapter 14 & 16).

ROSS, S.A.; WESTERFIELD, R.W. & JORDAN, B.D. (2010): *Fundamentals of Corporate Finance*, 9/e. Ed. McGraw-Hill (Chapters 15 & 16).

Chapter 6 .- THE DIVIDEND DECISION

- 6.1. Distribution of funds to shareholders and dividend rates
- 6.2. The dividend policy in perfect capital markets
- 6.3. The effect of transaction costs and taxes
- 6.4. The effect of agency costs
- 6.5. The choice of dividend policy

In this chapter we analyze the determinants of the dividend decision in the company. Based on the theory of irrelevance of dividend decision in the context of perfect capital markets, set forth by Miller and Modigliani, we analyze the influence that market imperfections, such as taxes, transaction costs, information asymmetry, conflict of interests have on the decision of dividends and their relevance for the valuation of the company.

Objectives:

- Analyze the relationship between the decision of dividends and firm value.

- Understand the assumption of irrelevance of dividend policy in the context of perfect capital markets.
- Know the market imperfections that cause the relevance of the dividend decision.
- Recognize and analyze the determinants of the decision to pay dividends in business firms.

Bibliography:

- BREALEY, R.; MYERS, S.; ALLEN, F. (2011): *Principles of Corporate Finance*. Ed. McGraw Hill. Tenth edition (Chapter 16).
- BREALEY, R.; MYERS, S.; MARCUS, A. (2009): *Fundamentals of Corporate Finance*, 6/e. Ed. McGraw Hill. (Chapter 17).
- ROSS, S.A.; WESTERFIELD, R.W. & JORDAN, B.D. (2010): *Fundamentals of Corporate Finance*, 9/e. Ed. McGraw-Hill (Chapter 17).

Chapter 7.- THE COST OF CAPITAL

- 7.1. The cost of capital in the company
- 7.2. The current cost of the different sources of funds
- 7.3. The weighted average cost of capital
- 7.4. The money supply curve
- 7.5. The separation of investment and financing decisions

The chapter is aimed at studying the opportunity cost of capital of the company. The cost of capital, established as the minimum return that must be required of an investment project, links investment decisions and financing decisions in the company. The estimation of the cost of capital is assessed by calculating the cost of debt and the estimated cost of equity, using different methodologies to their approach.

Objectives:

- Understand the value of the opportunity cost of capital: as the primary mechanism for evaluating investment projects, as a determinant of the decision of indebtedness of the company and as a factor that relates investment decisions and financing decisions.
- Knowledge of methodologies to estimate the cost of various sources of corporate funds.
- Calculate the weighted average cost of capital.
- To present different methodologies to approximate the opportunity cost of capital.
- Use the money supply curve as a tool to make investment decisions.

Bibliography:

- BREALEY, R.; MYERS, S.; ALLEN, F. (2011): *Principles of Corporate Finance*. Ed. McGraw Hill. Tenth edition (Chapters 3, 4 & 9).

BREALEY, R.; MYERS, S.; MARCUS, A. (2009): *Fundamentals of Corporate Finance*, 6/e. Ed. McGraw Hill. (Chapter 11 & 12).
ROSS, S.A.; WESTERFIELD, R.W. & JORDAN, B.D. (2010): *Fundamentals of Corporate Finance*, 9/e. Ed. McGraw-Hill (Chapter 14).

6. Methodology and work plan.

The program structure of the subject is implemented through classroom activities as well as distance learning work. Teaching is based on two types of activities: Lectures and classroom practices, with weekly sessions which last an hour and a half. These activities are combined with group tutoring sessions.

For the development of each topic of the subject, students may attend lectures, which will provide the students with a first contact with the subject. Also in this first session a course guide of this subject will be provided, including case studies, additional readings (articles of theoretical and practical nature) and work plans to be performed by the student, individually and in teams. The weight of each of these working activities will depend on the specific topic to be developed in the class session. In any case, it is aimed at promoting practical learning for the acquisition of skills described above. This practical training will take place through exercises and problems, focusing on further study and understanding of financial decision making in the company, looking for financial information about business decisions and conducting individual and group work on investment decisions, financing and distribution of dividends in business firms.

In this context, the work plan classroom activities are structured as follows:

- Lectures: These classes will raise the motivation of the topic and give an overview of its theoretical part. They are supported by the use of audio-visual media. Students have a basic bibliography and other additional materials to acquire knowledge.
- Classroom practice: These sessions will solve theoretical and practical issues related to the knowledge discussed in the lectures. Students' participation is required, as they will solve and discuss issues concerning the selection of investment projects, financing alternatives and / or distribution of funds.
- Group tutorials: These tutorials will be based on the resolution of questions raised by students. In the group tutorials proper development and understanding of content will be supervised as well as monitoring of group work and further focus on literature sources and reading materials to complement and extend knowledge on specific aspects of the subject. A closer proximity to students will allow attention to diversity and focus on initiative and concerns in order to improve their analytical and critical.

Class work must be combined with the following activities:

- Autonomous work of the student mainly focused on the study of the contents taught in class and in the preparation of classroom practices in advance.
- Team work on a topic or subject related to the contents of the subject which help students improve their skills and abilities related to teamwork, the pursuit of information, analysis and synthesis of content, argument and display capacity.

Students will be able to access teaching materials required for the development of these activities at the Virtual Campus of the University of Oviedo. At the Virtual Campus students will find class notes, readings, problems, practice exercises and other related materials.

The number of hours devoted to classroom activities (in class work) and to distance learning work are shown in the following table.

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Class work must be combined with the following activities:

- Autonomous work of the student mainly focused on the study of the contents taught in class and in the preparation of classroom practices in advance.
- Team work on a topic or subject related to the contents of the subject which help students improve their skills and abilities related to teamwork, the pursuit of information, analysis and synthesis of content, argument and display capacity.

Students will be able to access teaching materials required for the development of these activities at the Virtual Campus of the University of Oviedo. At the Virtual Campus students will find class notes, readings, problems, practice exercises and other related materials.

The number of hours devoted to classroom activities (in class work) and to distance learning work are shown in the following table.

The following is an indicative distribution schedule of issues over the weeks of second semester:

| Week | IN CLASS WORK | DISTANCE LEARNING WORK |
|--------|---|---|
| Week 1 | Introduction to the subject. Chapter 1 Organization of practices | Study of Chapter 1 Readings of Economic press. |
| Week 2 | Chapter 2 (sections 1,2 & 3) Discussion of readings. Chapter 1 Practices Chapter 1 | Study of Chapter 2 Readings and preparatory work for calculating valuation ratios of listed companies. |
| Week 3 | Chapter 2 (section 4) y Chapter 3 (sections 1 & 2) Solving Investment exercises: 1 to 3 | Study of Chapters 2 & 3 Interest rate curve construction |
| Week 4 | Chapter 3 (section 3) Solving Investment exercises: 4 to 6 Practice on interest rates | Study of Chapter 3 Readings and analysis of the Corporate Governance Report of a listed Company. Analysis of the ownership structure of listed companies. |
| Week 5 | Chapter 3 (sections 4 & 5) y Chapter 4 (sections 1 y 2) Solving Investment exercises: 7 to 9. corporate governance report | Study of Chapters 3 & 4 Solving proposed exercises |

| | | |
|---------|---|--|
| Week 6 | Chapter 4 (sections 3,4 & 5) Solving Investment exercises: 10 to 12. Readings discussion | Study of Chapter 4 Group work: defining a corporate investment project. |
| Week 7 | Chapter 5 (sections 1 & 2) Solving Investment exercises: 13 Group Work: Investment project. | Study of Chapter 5 Solving of proposed exercises. |
| Week 8 | Chapter 5 (sections 3 & 4) Solving exercises Chapter 5: 1 to 6 | Study of Chapter 5 Look for financial information of unlisted companies. |
| Week 9 | Chapter 5. (section 5) Solving exercises Chapter 5: 4, 5 & 6 | Study of Chapter 5 Analysis of the financial structure of unlisted companies. |
| Week 10 | Chapter 6 (section 1,2,3 & 4) Solving exercises Chapter 6: 1 to 3. | Study of Chapter 6 Readingson capital structure. |
| Week 11 | Chapter 6 (section 5) & Chapter 7 (section 1) Solving exercises Chapter 6: 4 | Study of Chapters 6 & 7 Solving proposed exercises. |
| Week 12 | Chapter 7 (sections 2 to 5) Solving exercises Chapter 7: 1 to 5 | Study of Chapter 7 Following the dividend policy of listed companies and analyzing a dividend announcement in the stock market. |

| | | |
|---------|---|--|
| Week 13 | Chapter 7 (sections 4 & 5) Solving exercises Chapter 7: 6 | Study of Chapter 7 Solving proposed exercises. |
| Week 14 | Concluding remarks and overview of the subject. | Sector by sector comparisons of debt and dividends |
| | | |

7. Evaluation of the student's learning results

The evaluation of the subject is based on two elements:

- 1) **Continuous assessment**, which is based on the effort and work of the student throughout the subject through different types of individual activities. The weight of the final grade is 40%.
- 2) **Final exam** which consists of a test set by which the knowledge acquired by the student and the ability to apply it to investment decisions, financing and dividends is assessed. The weight of this test in the final grade is 60%.

Description of ongoing evaluation activities:

Continuous assessment is based on the following elements:

- Conducting a series of follow-up tests without prior notice, where aspects of the topic under discussion in class will be asked or a practical exercise similar to those previously seen in class will be proposed for resolution. Therefore, continuous assessments raise issues or practical exercises discussed in previous sessions or in the current session, which evaluate students. For this reason, these tests cannot be retaken extraordinary exams. Scores obtained during unannounced continuous assessments will be kept. The maximum score of each unannounced assessment will be lower than one point (1 point), being three (3) the maximum possible total points obtained through this continuous assessment.

It is possible to give students additional points based on students class participation that will be added to those points obtained in the four surprise follow-up tests, to previously mentioned maximum of three (3) points.

- Group work on issues or matters related to the contents of the subject to be proposed or agreed with the teacher. This allows students to interact and discuss with other students and thus improve their skills and abilities related to teamwork, the pursuit of information, analysis and synthesis of content, argument and communication skills. The maximum score that each student can get is one (1) point and this activity cannot be retaken in the extraordinary exams.

8. Resources, bibliography and complementary documentation

Basic Bibliography:

BREALEY, R.; MYERS, S.; ALLEN, F. (2011): *Principles of Corporate Finance*. Ed. McGraw Hill. Tenth edition (Chapter 1 and and Chapter 2 – Section 2.3).

BREALEY, R.; MYERS, S.; MARCUS, A. (2009): *Fundamentals of Corporate Finance*, 6/e. Ed. McGraw Hill. (Part One: Introduction).

ROSS, S.A.; WESTERFIELD, R.W. & JORDAN, B.D. (2010): *Fundamentals of Corporate Finance*, 9/e. Ed. McGraw-Hill (Chapter 1).

Financial sites on the Internet

| | |
|--|--|
| Bolsa de Madrid | www.bolsamadrid.es |
| Comisión Nacional del Mercado de Valores | www.cnmv.es |
| Banco de España | www.bde.es |
| Fundación de Cajas de Ahorros | www.funcas.ceca.es |
| Securities Exchange Commission (SEC) | www.sec.gov |
| Cinco Días | www.cincodias.com |
| Expansión | www.expansion.com |

Subject Guide

1. Information about the subject

| | | | | |
|--------------------------------------|---|-------------------------|--|----------------|
| SUBJECT | Contabilidad de Costes y Control de Gestión/Cost Accounting and Management C. | | CODE | GADEMP01-2-007 |
| EDUCATIONAL OFFER | Graduado o Graduada en Administración y Dirección de Empresas Degree in Business Administration and Management | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | Nº TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| GARCIA SUAREZ JOSE LUIS | | jlgarcia@uniovi.es | | |
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| Arbesú López Maria Pilar | | parbesu@uniovi.es | | |
| RODRIGUEZ GUTIERREZ MARIA DEL CAMINO | | mcamino@uniovi.es | | |
| García Cornejo Beatriz | | bgarciac@uniovi.es | | |

2. Context

According to the Bachelor's Degree in Management and Business Administration Curriculum, *Cost Accounting and Management Control* is included in the module of Accounting, particularly under the heading *Management Accounting*. As students have no previous contact with determining the cost of a product and decision-making, the course will provide them with basic skills and knowledge of key concepts that will be very useful not only in subsequent accounting related courses, but also in order to complete their Bachelor's Degree and succeed in their professional environment.

The objective of the course is to provide people within the organization with information to help them make better decisions. Cost accounting measures, analyses and reports financial and non-financial information related to the costs of acquiring or using resources in an organization.

3. Requirements

The contents of this course are tightly related to subjects like *Organization and Management* and *Marketing*. It is highly recommended that the student has previously studied *Introduction to Accounting*. The course also requires knowledge of the microeconomic models which describe how a company works. In addition, the student should be competent in basic mathematical and statistical operations.

4. Competencies and learning results

The general competences which students will develop in *Cost Accounting and Management Control* include:

- Ability for analysis and synthesis.
- Learning ability.
- Ability for fluent oral and written communication in mother tongue.
- Knowledge and understanding of other languages, mainly English.
- Skills for searching and analysing information in the working environment.
- Ability to use ICT tools.
- Ability to work independently.
- Ability for teamwork.
- Ability to work in an international context.
- Critical and self-critical ability.
- Decision-making ability.
- Ability to put knowledge into practice.
- Creativity for finding new ideas and solutions.

- Organization and planning ability.
- Adaptability.
- Concern for quality and good work.
- Values and ethics.
- Integration of democratic values and the culture of peace in the working environment.
- Integration of the principles of equal treatment and opportunities for men and women in the working environment.
- Integration of the principles of equal opportunities and universal access for the disabled in the working environment.

Students will also develop the following specific competences on the course:

- Identify and apply quantitative tools in order to measure business performance.
- Draw up and analyze internal and external accounting information for management control and decision-making.
- Transfer information, ideas, problems and solutions in the area of business management to a specialist or non-specialist audience.
- Issue advisory reports on specific company and market situations.

As far as learning outcomes are concerned, the knowledge and skills that students will acquire upon successful completion of the course will enable them to:

- Understand the accounting principles and procedures underlying the firm's financial statements at a basic level and apply them in the bookkeeping process and transaction analysis.
- Complete the accounting cycle, determining accounting income and producing the annual financial statements.
- Promote ethical behaviour in accounting and ensure standards of professional behaviour.

- Apply accounting ratios in order to measure business performance.
- Interpret accounting information to evaluate the financial position of real companies, the success of their operations, and gain an insight into their future performance, based on real-world examples.
- Evaluate business performance.
- Identify, record and report relevant economic and financial data to allow informed business decision making.

5. Contents

Abbreviated Programme

Unit 1.- Introduction to Cost Accounting.

Unit 2.- Direct material costs.

Unit 3.- Labour costs.

Unit 4.- Cost assignment.

Detailed Programme

Unit 1.- Introduction to Cost Accounting.

1. Cost Accounting as a source of information for internal parties within the organization.
2. Costs and cost terminology.
3. Classifications of costs.

1.3.1. Fixed and variable costs.

1.3.2. Direct and indirect costs.

1.3.3. Product costs and period costs.

1.4 Relevant and avoidable costs.

Learning outcomes:

Understanding the decision-making process and the nature of the information which should be provided.

Unit 2.- Direct material costs.

2.1. Introduction.

2.2. Perpetual inventory.

2.3 Determining direct material costs.

2.4. Quantitative methods in stock control systems.

2.5. Just-in-time inventory management.

Learning outcomes:

Understanding how raw materials should be managed and the way their costs should be assigned to products.

Unit 3.- Labour costs.

3.1. Labour costs and their components.

3.2. Labour cost accounting.

3.2.1. Job cards and time sheets.

3.2.2. Idle time.

3.3. Accounting treatment of various labour cost items.

3.3.1. Types of incentives.

3.3.2. Overtime premium pay, shift premium pay and holiday and vacation pay.

3.4. Learning curve theory.

Learning outcomes:

Understanding how labour should be managed and the way its costs should be assigned to products.

Unit 4.- Cost assignment.

4.1. Introduction.

4.2. The allocation process.

4.3. Allocation bases.

4.4. Budgeted overhead rates.

4.5. Activity-Based Cost Systems (ABC).

4.6 Job order costing and process costing.

Learning outcomes:

Describing the process of assigning indirect costs to cost objects.

6. Methodology and working plan

6. Methodology and Teaching Plan

The methodology used in the course *Cost Accounting and Management Control* is based on a combination of in-class and distance learning activities, in both cases encouraging active student participation by means of the introduction of elements of dialogue and argument in the classes, aimed at assessing and supervising their understanding of the topics explained.

In this discipline theory and practice are perfectly integrated, so any teaching method for accounting must necessarily have a strong practical orientation on a sound theoretical basis, where the student tries to face and confront economic reality by applying theoretical knowledge.

A list of useful handbooks is included under the heading “Resources, Bibliography and Additional Information”. All the handbooks are available at the Law and Business Library of the University of Oviedo. In addition to the materials listed above, teachers will make other useful study materials available to students at the Virtual Campus.

The Teaching schedule is organized as follows:

- **In class work: 53 hours**

– *Lectures*. The course will include the “master class”, especially to cover the theoretical aspects of the subject, enabling the teacher to point out key points in a lesson, control the presentation time and promote effective methods to study the subject. Furthermore, the course will foster active participation and student commitment as an enhancement of lectures.

– *In-class practical sessions*. “Active-learning” techniques will be used aimed at encouraging student collaboration and interpersonal interaction among students as well as between the instructor and students.

– *Group tutorials*. Instructional activity conducted by a faculty member in order to review and discuss the materials and topics presented in class and learn how to use accounting software.

– *Evaluation session*. Theoretical and practical written exam used to assess student progress.

- **Distance learning work : 97 hours**

– *Individual work*. It is based on three types of activities: study of the theoretical aspects related to “lectures”, study of the practical aspects related to “practical sessions” and, when appropriate, out-of-class practice activities or completion of homework assignments.

The following tables show the distribution of time and for the different activities:

| COST ACCOUNTING AND MANAGEMENT CONTROL | Activity | Hours | Hours (%) |
|---|-----------------------------|--------------|-------------------|
| In- class work | Lectures | 20 | 53 (35.33%) |
| | In-class practical sessions | 23 | |
| | Group tutorials | 4 | |
| | Evaluation session | 6 | |
| | Other activities | | |
| Distance learning work | Individual work | 97 | 97 (64.67%) |
| TOTAL | | 150 | 150 (100%) |

| | | |
|--|-----------------------|-------------------------------|
| | In- class work | Distance learning work |
|--|-----------------------|-------------------------------|

| <i>Units</i> | <i>Total hours</i> | <i>Lectures</i> | <i>In-class practical sessions</i> | <i>Group tutorials</i> | <i>Evaluation session</i> | <i>Total</i> | <i>Group work</i> | <i>Individual work</i> | <i>Total</i> |
|--------------------|--------------------|-----------------|------------------------------------|------------------------|---------------------------|--------------|-------------------|------------------------|--------------|
| 1 | 21 | 3 | 3 | | | 6 | | 15 | 15 |
| 2 | 28 | 4 | 5 | | | 9 | | 19 | 19 |
| 3 | 28 | 4 | 5 | | | 9 | | 19 | 19 |
| 4 | 63 | 9 | 10 | | | 19 | | 44 | 44 |
| All the units | 10 | | | 4 | 6 | 10 | | | |
| Total hours | 150 | 20 | 23 | 4 | 6 | 53 | | 97 | 97 |
| (%) | 100 | 13.33 | 15.33 | 2.67 | 4 | 35.33 | | 64.67 | 64.67 |

7. Evaluation of the student's learning results

The evaluation of the course is based on two aspects:

1.- Continuous assessment. It involves analysing different parts of the learning process so as to assess student progress throughout the course and then produce a final evaluation result from these periodic assessments. This method of assessment is based on active commitment of students to in-class activities, objective follow-up tests and theoretical and practical quizzes, resolving cases, exercises and practical activities, writing reviews about readings and other materials. When a student's

activity negatively affects the normal process of a class, this will be borne in mind when considering the student's continuous assessment.

2.- Final exam. It is the overall assessment that takes place at the end of the learning process, which quantifies and evaluates student performance through a grade. Its primary purpose will be to assess the level of student achievement at the end of the course.

Grading system

The final grade in all examinations during the academic year 2015-2016 (January, May/June and July) will be a weighted average of scores on the continuous assessment and final examination with a weighting of 40% for continuous assessment and 60% for the final exam.

Summary Table 1

| Evaluations | Grading system | Weight in final grade (%) |
|---|------------------------------------|----------------------------|
| All examinations during academic year 2015-2016 | Continuous assessment + Final exam | Continuous assessment: 40% |
| | | Final exam: 60% |

The top score on the continuous assessment (4 points out of 10) can be achieved as follows: during lectures and in-class practical sessions, students will take four end-of-unit tests, each one accounting for a maximum of 1 point. Should tests be made up of multiple-choice and true/false questions, scoring rules will penalize wrong answers.

Summary Table 2

| Assessment | Activities and evaluation | Maximum grade (out of 10) |
|------------------------------|---|--------------------------------------|
| Continuous assessment | During lectures and in-class practical sessions: four tests. | 4 |
| Final exam | Written test with both theoretical questions and practical exercises. | 6 |

Grading system for those certified as registered part-time students:

Summary Table 3

| Evaluations | Grading system | Weight in final grade (%) |
|--|-----------------------|----------------------------------|
| All examinations during academic year 2015-2016 | Final exam | 100% |

Final exam dates will be the same for all students.

Successful completion of the course is achieved when the student achieves a final passing grade of 5 points or above (out of 10).

8. Resources, bibliography and complementary documentation

Basic bibliography

DRURY, C. (2009): Management accounting for business, Cengage Learning EMEA, Andover.

Complementary bibliography

García Suárez, J. L. (COORD); Arias Álvarez, A. M.; García Cornejo, B.; Machado Cabezas, A. y Pérez Méndez, J. A. (2010): Cálculo, Análisis y Gestión de Costes. Guía práctica para su aplicación en la empresa, Ediciones Delta, Madrid.

García Suárez, J. L. (COORD); Arias Álvarez, A. M.; García Cornejo, B.; Machado Cabezas, A. y Pérez Méndez, J. A. (2012): Cálculo de Costes y Control de Gestión. 70 casos de aplicación, Ediciones Delta, Madrid.

Amat, O.; Soldevilla, P. y Aguilá, S. (2003): Ejercicios Resueltos de Contabilidad de Costes, Gestión 2000, Barcelona.

Blanco, I. Aibar, B. y Ríos, S. L. (2001): Contabilidad de costes. Cuestiones, supuestos prácticos resueltos y propuestos, Prentice Hall, Madrid.

Horngren, Ch.T.; Datar, S.M.; Foster, G.; Rajan, M. y Ittner, C. (2009): Cost accounting. A managerial emphasis, Pearson Education Limited, Upper Saddle River.

López, A. y Menéndez, M. (1990): Curso de contabilidad interna, AC, Madrid.

López González, E.; Mendaña Cuervo, C. y Rodríguez Fernández, M. A. (1998): Ejercicios de contabilidad de costes y de gestión, Pirámide, Madrid.

Mallo Rodríguez, C.; Kaplan, R. S.; Meljem, S. y Gímenez, C. (2000): Contabilidad de Costos y estratégica de Gestión, Prentice-Hall, Madrid.

Prieto, B.; Santidrián, A. y Aguilar, P. (2005): Contabilidad de Costes y de gestión: un enfoque práctico, Ediciones Delta, Madrid.

Rayburn, L.G. (1996): Cost accounting: using a managerial approach, Times Mirror, Chicago.

Ripoll, V. M. y Balada, T. J. (2005): Información de costes para la toma de decisiones empresariales, Ediciones Gestión 2000.

Sáez Torrecilla, A.; Fernández Fernández, A. y Gutiérrez Díaz, G. (2004): Contabilidad de costes y contabilidad de gestión, (Volumen I y II), Mc Graw-Hill, Madrid.

Additional materials will be available at: www.campusvirtual.uniovi.es

Students may also visit the following websites:

| Institution | Website |
|---|--|
| Chartered Institute of Management Accountants (CIMA) | www.cimaglobal.com |
| Asociación Española de Contabilidad y Administración de Empresas (AECA) | www.aeca.es |

Subject Guide

1. Information about the subject

| | | | | |
|--------------------------|---|-------------------------|--|----------------|
| SUBJECT | Administración de la Producción/Production Management | | CODE | GADEMP01-2-008 |
| EDUCATIONAL OFFER | Graduado o Graduada en Administración y Dirección de Empresas Degree in Business Administration and Management | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | Nº TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| AVELLA CAMARERO LUCIA | | lavella@uniovi.es | | |
| LECTURERS | | EMAIL | | |
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| FERNANDEZ BARCALA MARTA | | mbarcala@uniovi.es | | |

2. Context

Production Management is a core subject that belongs to the topic "Production" within the module "Organization and Management" in the bachelor's degree in Business Administration. Production management involves the integration of numerous activities and processes to produce products and services in a highly competitive global environment. Many companies have experienced a decline in market share as a result of their inability to compete on the basis of product design, cost or quality. World class performance in operations, i.e., in product design, manufacturing, engineering and distribution, is essential for competitive success and long term survival. Therefore, the aim of this course is to offer the student a strategic overview of the most important aspects of the strategy to manage firms' production, so that at the end of the course students have a fair understanding of the role Production Management plays in business processes. Emphasis is given both to familiarization of various production processes and systems, and to strategic analysis of relevant decisions concerning the firms' production strategy related to: new product development, capacity, location, value chain management, inventory and material planning and control systems, and quality management.

The content of this course is related to "Introduction to Business", which is a core subject during the first year offering an overall understanding of the firm and its functional areas. Besides, within the topic of "Production", Production Management is integrated with "Innovation and Technology Management" an elective course focused on analyzing how effective technology management can be as a source of sustainable competitive advantage.

3. Requirements

Although specific prerequisites have not been established to follow this subject, it is convenient for students to have passed the course "Introduction to Business", which is a core subject during the first year. Besides, in order to fully contribute to class discussion and follow the practical content of the course, students are expected to have basic computer skills to search for additional material for work assignments.

4. Competencies and learning results

Specific Competences

- Design the strategic production planning of a firm.
- Transfer information, ideas, problems and solutions in the area of business management to a specialized or non-specialized audience.
- Write reports making assessments of particular situations faced by firms and markets.

Learning Results

- Identify the different types of production processes, as well as the strategic implications of their implementation.
- Design the firm's production strategy, considering its integration within the overall firm's strategic planning.
- Identify and understand the critical decisions to be taken in relation to the production function within a firm.

5. Contents

Production Management covers the most important dimensions within the firm's production strategy. Therefore, it is focused on analyzing concepts such as the production function, the different types of production systems, and the process of planning a strategy within the area. Emphasis is given to strategic analysis of critical decisions concerning the firms' production strategy, such as those related to: product design, process selection, capacity, plant location, inventory and material planning and control systems, and quality management.

Abbreviated contents

Lesson 1. Production Function and Production Strategy

Lesson 2. Product Design and Process Selection

Lesson 3. Capacity and Location

Lesson 4. Inventory Management

Lesson 5. Quality Management

Extended contents and learning results

Lesson 1. Production Function and Production Strategy

1. Production function and production systems
2. Production strategic planning
3. Types and evolution of production processes
4. Productivity definitions and measures

Lesson 2. Product Design and Process choice

1. New product development

1.1. Functional team structures

1.2. Lightweight and heavyweight team structures

1.3. Autonomous team structures.

2. Layout

3. Process technology: Automation

Lesson 3: Capacity and location

1. The concept of capacity

2. Capacity planning

3. Concepts related to capacity

3.1. Economies and diseconomies of scale

3.2. Economies and diseconomies of scope

3.3. Experience effect

4. The concept of industrial location

5. Factors affecting location decisions

Lesson 4. Inventory management

1. Basics on materials and inventories management

- 1.1. Types of inventory
 - 1.2. Batch scheduling
 - 1.3. Supply chain management
2. Methods for materials and inventory requirements planning
 - 2.1. Materials requirement planning and its evolution
 - 2.2. The *Kanban system*

Lesson 5: Quality management

1. The concept of quality and its relevance
2. Fundamentals of total quality management (TQM)
3. Total quality management (TQM) tools

6. Methodology and working plan

Learning methodology includes both, activities which require attendance and activities which do not.

In class activities.

Lectures: Sessions aimed at introducing and developing the key ideas and concepts of each topic. They involve a presentation by the teacher who will use audio–visual support, but students are also encouraged to actively participate with their opinions to class discussion. A basic bibliography will be available for students in order to help following and understanding these lectures. Besides, additional material will be available on-line at the university's e-Campus. Therefore, lecture attendance is considered as a requirement in order to correctly follow and pass the course.

Seminars: They are aimed at developing practical contents within each topic. They involve interaction between the teacher and the students. Students are expected to

discuss issues, press news and cases, and critically formulate their own arguments. Assignments will be scheduled weekly, and students are expected to prepare them in advance before the seminar takes place. At the beginning of each seminar, students will be required to personally hand in a written paper to the teacher with the assignments' solution.

All the material and information of the weekly assignments scheduled for each seminar, will be available on-line at e-Campus.

Group tutorials: They are aimed at solving questions, verifying that students correctly understand and develop the contents, advising students about complementary bibliography, and checking the progress of teamwork.

- During these group tutorials the professor will also check the progress of a compulsory assignment that students have to do along the course. This assignment involves compulsory reading and critical analysis of the book: WOMACK, J.P.; JONES, D.T.; ROOS, D. (2007): "*The Machine That Changed the World: How Lean Production Revolutionized the Global Car Wars*". Simon & Schuster Ltd.

Students will be required to do a team-work activity related to the previous reading. The team will be made up of a maximum of 4 students. In the last group tutorial session, each team will be required to: hand in a written critical analysis of the book proposed to the professor, and make a presentation following the instructions given.

Evaluation sessions: To supervise the learning progress of the student. They will take place during the lectures, seminars, and group tutorials sessions. Likewise, there is a final exam.

Other activities: Conferences or seminars organized by the School of Economics and Business, and/or the Business Administration Department, given by firm executives or experts in fields related to Production Management. These activities are not compulsory; however it is advisable for students to attend in order to get a better insight of the contents analyzed in the course. Students may be asked to do some activities related to these seminars or conferences.

Distance learning activities

Individual work: It is basically related to (1) studying the contents that are presented in the lectures, (2) preparing in advance the necessary material in order to be able to attend seminars, and (3) compulsory reading and critical analysis of the book WOMACK, J.P.; JONES, D.T.; ROOS, D. (2007): "*The Machine That Changed the World: How Lean Production Revolutionized the Global Car Wars*". Simon & Schuster Ltd.

Team work: It is related to the student gathering information, analyzing and summarizing contents, developing arguments and making presentations, in order to undertake the compulsory team-work activity.

Materials needed to undertake all the activities correctly will be available on-line at the university's e-Campus —teaching notes, additional materials, readings, questions... The e-Campus also offers the possibility to develop discussion forums. Both, email and professors' web pages will also facilitate communication between professors and students.

We include two tables with relevant course information. The first one summarizes an estimation of hours by type of learning activity. The second one shows breakdown of different activities by week of class. These tables are an approximation and may vary depending on the class progress.

| Activity | Hours | Total hours |
|---|------------|-------------|
| In class | 22,5 | 50 |
| <ul style="list-style-type: none"> • Lectures • Seminars • Group tutorials • Evaluation | 18 | |
| | 4 | |
| | 5,5 | |
| Distance learning | | 100 |
| <ul style="list-style-type: none"> • Individual work • Teamwork | 75 | |
| | 25 | |
| TOTAL | 150 | 150 |

| Week | In class activities | Students' work |
|----------|---|--|
| 1 | Presentation of the theoretical and practical contents of the course. Explanation of tools to search information for the | Revision of the course guide and of the instructions for the team- |

| | | |
|----------|--|---|
| | course Lesson 1. | work activity Study lesson 1 |
| 2 | Lesson 1 | Study Lesson 1, prepare seminar and look for news in newspapers/internet Prepare team-work activity |
| 3 | Lesson 1 Solve Lesson 1 cases and discussion of news Organization of the teamwork activity | Study Lessons 1, prepare seminar and look for news in newspapers/internet Prepare team-work activity |
| 4 | Lesson 1 Lesson 2 Solve Lesson 1 cases and discussion of news | Study Lesson 2, prepare seminar and look for news in newspapers/internet Prepare team-work activity |
| 5 | Lesson 2 Solve Lesson 2 cases and discussion of news | Study Lessons 2, prepare seminar and look for news in newspapers/internet Prepare team-work activity |
| 6 | Lesson 2 Lesson 3 Solve Lesson 2 cases and discussion of news Check of the progress of team-work activity and presentation of partial results | Study Lesson 3, prepare seminar and look for news in newspapers/internet Prepare team-work activity |

| | | |
|----|---|--|
| 7 | Lesson 3 Solve Lesson 2 cases and discussion of news | Study Lesson 3, prepare seminar and look for news in newspapers/internet Prepare team-work activity |
| 8 | Lesson 3 Solve Lesson 3 cases and discussion of news | Study Lesson 3, prepare seminar and look for news in newspapers/internet Prepare team-work activity |
| 9 | Lesson 3 Lesson 4 Solve Lesson 3 cases and discussion of news | Study Lesson 4, prepare seminar and look for news in newspapers/internet Prepare team-work activity |
| 10 | Lesson 4 Solve Lesson 3 cases and discussion of news Check of the progress of team-work activity and presentation of partial results | Study Lesson 4, prepare seminar and look for news in newspapers/internet Prepare team-work activity |
| 11 | Lesson 4 Solve Lesson 4 cases and discussion of news | Study Lesson 4, prepare seminar and look for news in newspapers/internet Prepare team-work activity |
| 12 | Lesson 4 Lesson 5 Solve Lesson 4 cases and discussion of news | Study Lesson 4, prepare seminar and look for news in newspapers/internet Prepare team-work activity |

| | | |
|---------------------|--|--|
| 13 | Lesson 5 Solve Lesson 4 cases and discussion of news | Study Lesson 5, prepare seminar and look for news in newspapers/internet |
| 14 | Lesson 5 Solve lesson 5 cases and discussion of news Oral presentations of the firm-case teamwork activity. | Study Lesson 5, prepare seminar and look for news in newspapers/internet |
| 15 | Lesson 5 Solve lesson 5 cases and discussion of news | Prepare final exam |
| Exams period | | Prepare final exam |

7. Evaluation of the student's learning results

The evaluation process will be based on:

1. *Controlled assessment*. Students can obtain a maximum of 4 points as a result of doing the following compulsory activities:

a. Each week, class participation and both hand in and resolution of assignments will be evaluated as follows:

- Individual written assignments handed in to the professor each week will be evaluated. Students can obtain a maximum of 0,5 points as a result of handing in the assignments. In addition, the professor will choose and evaluate 1 one the assignments handed in (maximum of 0,5 points).

- Individual exposition and discussion of the different assignments proposed each week. Students can obtain a maximum of 0,75 points as a result of class participation.

b. Students will have to individually undertake 2 different learning assignments related to lectures. These assignments will be based on written tests to be done at any time during the lectures in the semester. Each test will have a maximum weight of 0.5 points in the final grade.

c. Compulsory reading and critical analysis of the book: WOMACK, J.P.; JONES, D.T.; ROOS, D. (2007): "The Machine That Changed the World: How Lean Production Revolutionized the Global Car Wars". Simon & Schuster Ltd. This reference will be discussed during group tutorial sessions. Students will be required to do a team-work activity related to the previous reading. The team will be made up of a maximum of 4 students. In the last group tutorial session, the each team will be required to: hand in a written critical analysis of the book proposed, and make a presentation following the instructions given by the professor. A maximum of 1,25 points can be obtained thanks to this activity.

.Once the classes are over, the student will be informed of the grade obtained as a result of the controlled assessment process.

2. *Final exam.* Once the semester is over, students will have to undertake a final exam with essay questions of both theoretical and practical nature. A maximum of 6 points can be obtained in this exam. The exam will not only evaluate students' knowledge of the subject, but also the use of an appropriate technical language and correct language style.

To pass the course students must obtain a minimum of 5 points as result of adding both, the controlled assessment and the final exam. However, a minimum of 2 points is required (in the 6 point) final exam to pass the course. Both, the assessment process and the weights of the different activities on the final grade will be maintained also for the current academic year extraordinary assessments (May or July).

Students choosing not to participate in the controlled assessment process can pass the course if they obtain a minimum of 5 points in the 6 points final exam. The following table shows the assessment process that will be followed in this subject.

| Assessment | Weight in final grade (points) |
|---|--------------------------------|
| Controlled assessment | |
| <i>Compulsory assignments</i> | |
| Discussion/Exposition in class of the practical assignments | 0,75 (maximum) |
| Written assignments handed in to the teacher | 0,5 (maximum) |
| One activity of the assignments will be selected and graded | 0,5 (maximum) |
| 2 individual learning assignments | 1 (maximum) |
| Preparation and exposition of the book analysis (teamwork activity) | 1,25 (maximum) |

| | |
|---|--------------------|
| <p>Minimum requirements: Yes No</p> <p>Controlled evaluation assignments will take place in lectures, seminars and group tutorials, which means that attendance is compulsory.</p> | |
| <p>Final exam</p> <p>Maximum grade: 6</p> <p>Compulsory: Yes No</p> <p>Note that, despite of the grade achieved as a result of the controlled assessment, a minimum of 2 points is required the final exam to pass the course.</p> | <p>6 (maximum)</p> |

8. Resources, bibliography and complementary documentation

Basic bibliography:

- HEIZER, J. and RENDER, B. 2011. Principles of Operations Management (8th edition) Prentice Hall.
- SCHROEDER, R.G., GOLDSTEIN, S.M., and RUNGTUSANATHAM, M.J. 2011. "Operations Management: Contemporary Concepts and Cases, 5/e" Boston: McGraw-Hill/Irwin.
- SCHROEDER, R.G., 2004. "Operations Management: Contemporary Concepts and Cases, 2/e" Boston: McGraw-Hill/Irwin.

Spanish manuals:

- FERNÁNDEZ, E.; AVELLA, L. y FERNÁNDEZ, M. (2006): *Estrategia de Producción* (segunda edición), McGraw-Hill, Madrid.

- HEIZER, J. y RENDER, B. (2007): *Dirección de la Producción* (octava edición), Prentice Hall, Madrid.

Additional bibliography:

- JACOBS, F. R. and R. B. CHASE. Operations and Supply Chain Management, 13th edition, 2011, McGraw-Hill Irwin.
- KRAJEWSKI, L.J. and RITZMAN. 2005. Operations Management: Processes and Value Chains. (7th ed). Prentice Hall.
- RUSSELL, and TAYLOR (2005) Operations Management: Quality and Competitiveness in a Global Environment, 5th Edition. Wiley.
- STEVENSON, W.J. 2005. Operations management. Eighth Edition. Irwin/ McGraw-Hill.

- CHASE, R. B. y AQUILANO, N. J. (2009): *Administración de Operaciones* (duodécima edición), McGraw-Hill, México.
- HEIZER, J. y RENDER, B. (2007): *Dirección de la Producción* (octava edición), Prentice Hall, Madrid.
- KRAJEWSKI, L. J.; RITZMAN, L. P. y MALHOTRA M. (2008): *Administración de Operaciones. Estrategia y Análisis* (octava edición), Prentice Hall, México.
- MIRANDA, F. J.; RUBIO, S.; CHAMORRO, A. y BAÑEGIL, T. (2008): *Manual de Dirección de Operaciones*, Thomson, Madrid.
- SCHROEDER, R. G. (2011): *Administración de Operaciones. Concepto y Casos Contemporáneos* (quinta edición), McGraw-Hill, México.

Subject Guide

1. Information about the subject

| | | | | |
|--|---|-------------------------|--|----------------|
| SUBJECT | Dirección de Recursos Humanos/Human Resources Management | | CODE | GADEMP01-2-009 |
| EDUCATIONAL OFFER | Graduado o Graduada en Administración y Dirección de Empresas Degree in Administration Business and Management | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | Nº TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| JUNQUERA CIMADEVILLA BEATRIZ | | beatrizj@uniovi.es | | |
| LECTURERS | | EMAIL | | |
| FERNANDEZ MUÑIZ BEATRIZ | | beatrizf@uniovi.es | | |
| PEREZ-BUSTAMANTE ILANDER GUILLERMO OLAVI | | gperez@uniovi.es | | |
| LOZANO MOSTERIN JESUS | | lozano@uniovi.es | | |
| ORDIZ FUERTES MONICA | | ordiz@uniovi.es | | |
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| Pérez López Susana | | sperez@uniovi.es | | |

2. Context

~~Human Resource Management (HRM) is included in the Organization and Management module and, more specifically, it is classified under the General Management label in the bachelor's degree in Business Management and Administration. This course introduces the general theoretical knowledge on people management. Additionally, the course comprises a set of practice-based activities aimed at the development of several general competences -see section 4 of this document- and various specific competences –mainly those related to human resource management and planning and its role on organizational strategy. Following the first-year course “Introduction to Business”, students are expected to develop a deeper understanding of several dimensions of business management. Among other courses, Human Resource Management contributes to this objective by further studying human capital management. Following an analysis of the link between human resource management and organizational strategy, in this course we will study HRM activities and decisions, i.e., job analysis, recruitment, selection and staffing; training and career development; and performance appraisal and compensation.

3. Requirements

None.

4. Competencies and learning results

Regarding the general competences fixed for the bachelor's degree in Business Management and Administration at the University of Oviedo, this course contributes to the development of the following skills:

- Ability to search for and to analyze work-related information.
- Ability to work autonomously.
- Ability to work within a team.
- Ability to apply theoretical knowledge to practice.
- Concern for quality and good work.
- Values and ethical behavior.

This course is also intended to develop the following specific competences:

- The elaboration of the firm's strategic planning.
- The planning and management of human resources.
- The issuing of advisory reports on specific firms and markets situations.

Lastly, these are the expected students' learning results from this course:

- To understand the nature of the firm, its internal dynamics and its organizational structure.
- To analyze the issues that may arise between the firm and its stakeholders, as well as to identify appropriate patterns of action.
- To plan the firm's human resources strategy and to design specific HR policies.

5. Contents

The course follows basically the textbook Gómez-Mejía, L. R., Balkin, D. B., & Cardy, R. L. (2010): *Managing Human Resources*, Pearson, New York. (7th/edition).

5.1. Summary of contents

Lesson 1. Introduction and context of Human Resource Management

- Lesson 2. Basic processes in Human Resource Management
- Lesson 3. Staffing
- Lesson 4. Employee development
- Lesson 5. Performance appraisal and compensation

5.2. Detailed contents and learning objectives

- Lesson 1. Introduction and context of Human Resource Management
 - 1.1. People and organizations
 - 1.2. Human resource management objectives
 - 1.3. Human resource management functions
 - 1.4. The Human Resources Department
 - 1.5. Strategic human resources management

Learning objectives

- a) List the factors influencing employee motivation that are under managers' control.
- b) Understand the impact that human resources may exert on firm performance.
- c) Describe how firms may use human resource functions to cope with workplace changes and trends.
- d) Analyze the role of the HR Department in the organization.
- e) Debate how HR strategy can help the firm achieve a sustained competitive advantage.

Readings

Gómez-Mejía, L. R., Balkin, D. B., & Cardy, R. L. (2010): Chapter 1; (7th/edition)

- Lesson 2. Basic processes in Human Resource Management
 - 2.1. Job analysis
 - 2.2. Human resource planning

Learning objectives

- a) Assess and discuss a given job analysis, description and specifications.
- b) Know the elementary job analysis techniques.
- c) Choose the most appropriate job analysis technique given their characteristics.
- d) Identify the phases on human resource planning, as well as its main influences.
- e) Describe the elementary tools used in human resource planning.

Readings

Gómez-Mejía, L. R., Balkin, D. B., & Cardy, R. L. (2010): Chapters 1 & 2; (7th/edition)

Lesson 3. Staffing

3.1. Recruitment

3.2. Employee retention

3.3. Selection

3.4. New employee orientation and socialization

Learning objectives

- a) Understand human resources supply and demand.
- b) Weigh the advantages and disadvantages of internal and external recruiting.
- c) Analyze the mechanisms that a firm may use to avoid valuable employees turnover.
- d) Choose between different employee selection methods.
- e) Discuss personnel decisions contributing to avoid the recruitment of the wrong employees.
- f) Describe new employee orientation and socialization processes.

Readings

Gómez-Mejía, L. R., Balkin, D. B., & Cardy, R. L. (2010): Chapters 5 & 8; (7th/edition)

Lesson 4. Employee development

4.1. Training and development

4.2. Identifying training needs

4.3. The training process and its implementation

4.4. Managing career development

4.5. Implementation of career development programs

Learning objectives

- a) Determine when employees need training and the best type of training given a company's circumstances.
- b) Recognize the characteristics that make training programs successful.
- c) Discuss a rigorous employee career development plan.
- d) Understand the key aspects of career development.
- e) Analyze how organizational culture may support career development.

Readings

Gómez-Mejía, L. R., Balkin, D. B., & Cardy, R. L. (2010): Chapters 8 & 9; (7th/edition).

Lesson 5. Performance appraisal and compensation

- 5.1. Appraising performance
- 5.2. Key decisions in performance appraisal
- 5.3. Performance appraisal design
- 5.4. Introduction to compensation
- 5.5. Compensation systems

Learning objectives

- a) Explain why performance appraisal is important and describe its components.
- b) Discuss the advantages and disadvantages of several performance appraisal methods.
- c) Analyze the most common biases in performance appraisal and be able to manage their adverse effects.
- d) Understand how performance appraisal contributes to managing and enhancing employee performance.
- e) Identify basic principles in compensation.
- f) Weigh the strategic advantages and disadvantages of the different compensation options.
- g) Develop a job-based compensation plan.

Readings

Gómez-Mejía, L. R., Balkin, D. B., & Cardy, R. L. (2010): Chapters 10, 11 & 12; (7th/edition).

6. Methodology and working plan

Theoretical sessions will be organized as lectures. Students should have previously read the book chapter.

Practice-based sessions will be based on the elaboration of a HRM plan and development of the HRM practices needed to open a new shop.

Group tutorial sessions. The students will work on practicing communication practices and skills in companies through a computer simulation on communication within an academic department. The students will define their communication strategy and develop a presentation of their results.

7. Evaluation of the student's learning results

There are two assessment methods:

1. Course deliverables and final exam.

Course deliverables will be based on:

1. In-class activities that require students' qualitative active participation based on cases, exercises, newspaper articles, movies.
2. Group Tutorial assignment: the written presentation of the communication strategy in an organization to be produced and presented written in group.
3. Team work assignment. Students will have to produce and present a written report related to the HRM strategy for the employment policy and necessary practices for a small and medium sized firm.

4. The global weight of all course deliverables part of the continuous evaluation activities in the student's final grade is cumulative and accounts for 60% of the total grade.

Quality in-class active participation will be evaluated basically in terms of the student's ability to apply theoretical knowledge to questions and cases, especially emphasizing the ability to consider different points of view, to identify the perceptions of the various agents involved and to propose actions that, while satisfying each conflicting group demands, fulfill the expectations and interests of the firms as a whole. Students should be able to support their points with structured arguments and engage in robust debate. Here are some thoughts to guide the participation:

- Did you deliver in class assignments required?
- Are your points relevant to the discussion, or are they detracting from it?
- Does your point reflect preparation and careful consideration of the day's assignment?
- Are you stating a unique perspective, or simply rephrasing the comments of another participant?
- Are you clear in articulating your point?
- Does your style demonstrate empathy for other perspectives?

The weight of in-class participation in the students' final grade is 10%.

Group tutorial will be valued on the presentation of the strategy followed and not necessarily on the results achieved in the simulation adopted. The weight of the group tutorial in the students' final grade is 10%.

Assessment of *teamwork* (group assignment -essay) will be based on clarity, synthesis capability, depth of knowledge and competence in the application of theoretical knowledge to actual HRM related problems in addition to teamwork abilities and written and oral expression and communication skills showed in the essay presentation. This assignment and its oral presentation represent 25% of the students' final grade (2,5 points). This deliverable will include both a written piece and Power Point slides. The team should be prepared to make a 20-minute presentation for each deliverable in class, with an additional 5-minutes for Q&A. During the course there will be deadlines to submit parts of this assignment. Not delivering the assignments on time will penalize the grade 0,5 points per deadline missed; though only the content in the final report will be taken onto consideration for the evaluation. The work will be valued with the following criteria: 1,5 points the written document; 0,75 points for oral presentation; 0,25 points for the best paper (winner of the bid).

Requirements: Please put all the ads and cvs selected in an annex. Please keep the papers to a maximum of 15 1,5 spaced pages (annexes excluded). Use a Times new roman 12 letter. Please take the extra time, rewrite and be concise: It should be a shorter, more concise, executive version, as the one you would provide to your client, boss or CEO.

Grammar and spelling errors will reduce the grade. Please pay attention to detail. If there are too many errors your paper will be handed back and you will

receive a zero grade for the written part.

Peer Evaluation of *teamwork* (15%) 1,5 points. Distribution: 0,4 points for you overall peer evaluation, 0,6 points for your peer evaluation in factors a.b and c (described bellow). 0,5 points for the quality of your individual report.

In the group assignment, students will be evaluated by each of the teammates for their participation. The grade will be based on a ranking of 1-5 (5 being the best score, 1 being the worst) on the following factors.

- a. Hard Work – Did this person pull their share of the load? Were they at meetings, prompt with their deliverables, and deliver high-caliber work?
- b. Leadership – Did they help make the important decisions? Did they contribute their own ideas and help mold the project?
- c. Collaboration – Was this person a team player? Did they ask for help when they needed it and offer help to others?

Part of being a HRM is evaluating peer and employee performance. If everybody on your team gives everybody else 4 points or over on all categories (or a median of 4,5 points), each team member will receive 2,5 .

In addition you have to assign 100 points amongst the group members.

Please take into consideration that the scores have to be reasoned and both this information and the points submitted will be treated as confidential. Students will individually upload them through the individual campus. Students who do not produce this evaluation for all their teammates, will get zero points.

The final written exam will include only theory questions to develop. It is valued on 10 points and its weight on the final grade is 40%. One or more intermediate tests may be given, covering concepts in the required reading, or presented in class. These will not be lengthy “exams” but will test your ability to recall and apply basic concepts from the course. If successfully passed, students will not be required to answer those questions in the final exam.

To pass the course the student will have to achieve a total of at least 5 points. There is a minimum required of 2,5 points in the global addition of the written exam and in class of participation. The results obtained in the continuous assessment will be considered in all grading periods during the current academic course.

1. Final exam

Those students who cannot participate in the continuous assessment activities and are granted by the Dean’s Office differentiated evaluation can sit only a final exam, which is valued on 10 points and will have theoretical and practical questions. Students should get a 5 to pass the course. Students should contact the teachers during the first month of the course to inform them about the differentiated exam process.

8. Resources, bibliography and complementary documentation

Basic references:

Gómez-Mejía, L. R., Balkin, D. B., & Cardy, R. L. (2010): *Managing Human Resources* (7th edition), Pearson, New York.

Additional references:

Byars, L. L. & Rue, L. W. (2010): *Human Resource Management* (10/e), McGraw-Hill/Irwin, New York.

Chiavenato, I. (2007): *Administración de Recursos Humanos. El Capital Humano en las Organizaciones* (8/e), McGraw Hill, México.

Ivancevich, J. M. (2009): *Human Resource Management* (11/e), McGraw-Hill/Irwin, New York.

Werther, W. B., & Davies, K. (2008): *Administración de Recursos Humanos* (6/e.), McGraw Hill, México.

Other materials:

- 1) Movies to watch and debate
- 2) Texts and news for discussion
- 3) Readings on current issues
- 4) Cases for discussion/solving.

Subject Guide

1. Information about the subject

| | | | | |
|------------------------------|---|-------------------------|--|----------------|
| SUBJECT | Mercados e Instituciones Financieras/Financial Markets and Institutions | | CODE | GADEMP01-3-005 |
| EDUCATIONAL OFFER | Graduado o Graduada en Administración y Dirección de Empresas Degree in Business Administration and Management | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | N° TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| LECTURERS | | EMAIL | | |
| GOMEZ ANSON SILVIA | | sgomez@uniovi.es | | |
| ARRONDO GARCIA RUBEN | | rarrondo@uniovi.es | | |
| MENENDEZ ALONSO EDUARDO JOSE | | emenende@uniovi.es | | |

2. Context

The aim of this course is the study of the Spanish financial system in an European and international context, enabling students to understand the functioning of financial institutions and operations that are performed in the financial markets. This involves detailed knowledge of the three elements that underpin any financial system: financial markets, monetary and capital, financial intermediaries and financial assets or securities, that is, instruments that allow an easier and adequate transmission. This is one of three compulsory courses of the Finance Module. Offered in the third year of Business Administration and Management, it is the introductory course Financial Markets Matter. It precedes the following courses: Financial Investments and Financial Risk Management, courses that are offered respectively in the second half of the third year and the first half of fourth grade. The course is coordinated with other subjects in the Finance module, and there are many interactions between them. Corporate Finance (compulsory subject in the second semester of second year) provides students with the basic tools for making investment decisions, financing and distribution of dividends in companies. Financial Investments (compulsory subject in the second semester of third year) analyzes the different methods of valuing equities, fixed income, derivatives and financial assets in the context of portfolio management. In addition, Markets and Financial Institutions is also related to other electives courses in the Finance module, in particular the Financial Risk Management course.

3. Requirements

Students require knowledge of the contents of the first-year mathematics course (especially knowledges concerning the third block: Financial Mathematics), and the

contents of the first year 'course Introduction to Macroeconomics (especially the contents that refer to Item 4: Financial Markets). It would also be useful the knowledge acquired in the subjects of the first year's courses: World Economic History and the World Economy, as well as the knowledge acquired in the course of Corporate Finance (second year).

4. Competencies and learning results

The specific objectives of the course Financial Markets and Institutions are:

- To understand what a financial system is, the functions of a financial system, the financial system structure and the parts of a financial system.
- To study the vocabulary characteristic of the debt markets, equities and derivatives.
- To know the agents and institutions involved in the debt, equity and derivatives markets.
- To understand the characteristics of debt financial assets and the operations in the debt markets, including private and public debt.
- To know the characteristics of the interbank market, and its importance.
- To analyze the asset securitization transactions, identifying the actors involved in the transactions, and the role they perform.
- To understand the characteristics of equities and stock market performance.
- To compare the features of futures and options, and to understand the functioning of derivatives markets.
- To study the operation of banks, the operations they conduct and their importance, both nationally and internationally.
- To learn the basic regulation of the banking system (credit, deposit protection, FROB ...).
- To understand the characteristics and regulation of investment funds, investment companies and their comparative importance in Spain and internationally.
- To know the characteristics and importance of insurance companies and pension funds.
- To implement MiFID for designing / advising the client, according to their risk profile and financial situations.
- To study the role played by investment banks, utilities investment funds and venture capital
- To analyze the role of rating agencies in assessing credit risk and its implications on international financial markets.
- To identify the critical factors that trigger financial crises and analyze their impact on the overall economy.
- To interpret financial information in the financial press (relevant news, stock information ...)

The generic Competencies the student acquires in the course of Markets and Financial Institutions are:

- Capacity for analysis and synthesis.
- Ability to learn.
- Ability to communicate fluently spoken and written in the language.
- Knowledge and understanding of other languages, mainly English.
- Ability to search and analyse information sources in the workplace.
- Ability to work as a team.
- Ability to make decisions.
- Ability to apply knowledge in practice.
- Ability to find creative new ideas and solutions.
- Initiative and entrepreneurial spirit.
- Ability to organize and plan.
- Ability to adapt to new situations.
- Concern for quality and a job well done.

- To have values and an ethical behavior.

The specific skills the student acquires in the course Financial Markets and Institutions are:

- Manage and interpret specific software for data processing.
- Designing and financing investment strategies in financial markets.
- To transmit information, ideas, problems and solutions in the field of business management to both specialist and non-specialists.
- To issue advisory reports on specific situations of companies and markets.

Learning outcomes. At the end of the course the student should be able to:

- Understand the functions and operations that are performed in the financial markets.
- Find, analyze and interpret information in financial markets.
- Identify and understand different kinds of financial risks and hedging.
- Know valuation methodologies for financial assets and fixed income.
- Analyze and describe the processes of price formation in financial markets.

This subject, in addition to providing specialized training in aspects Markets and Financial Institutions is the basis for the understanding of other subjects in the field of Financial Markets. It looks for the employability of graduates in a related professional side financial markets and financial institutions. Its aim is to enable graduates to get to their jobs with skills that enable them to operate in financial markets and to manage the assets and understand the financial markets.

5. Contents

The course contents are organized into 8 themes grouped in four thematic blocks. The first set is devoted to the Introduction. It includes a single theme on the financial system, the second block includes four themes dedicated to the analysis of assets and financial markets: interbank and corporate bond markets (theme 2), public debt markets (theme 3), equity markets (theme 4) and derivatives markets (theme 5). The third section includes the topics financial institutions: credit institutions (theme 6) and other financial institutions and agents (theme 7). The last block of the course is devoted to the study of financial crises, especially the analysis of the latest financial crisis (theme 8):

Block 1: Introduction

Theme 1: Overview of the Financial System

Block 2: Financial Markets

Theme 2: interbank and corporate bond markets

Theme 3: The public debt markets

Theme 4: The equity markets

Theme 5: Derivatives markets

Block 3: Financial Institutions

Theme 6: Credit Institutions

Theme 7: Other financial intermediaries and agents

Block 4: Financial Crisis

Theme 8. Financial Crisis: Causes and Consequences

6. Methodology and working plan

The development program of the course is done through contact and non-activities. Actual teaching is based primarily on two types of activities: lectures and classroom practices, with weekly sessions of an hour and a half each. These activities are complemented by group tutoring sessions. For the development of each topic of the course will be taught sessions of lectures in the form of lectures, in which the student will provide a first contact with the subject being treated. Practices and links to the readings for each topic are available on the Virtual Campus. The list of topics for group work is also available in the Virtual Campus. The course has a high practical component. It seeks to promote practical learning to allow the acquisition of skills described above. This practical training will take place through the implementation of issues, problems and exercises, aimed at further study and knowledge of markets and financial institutions, lectures, access to websites of interest... In this context, the work plan classroom activities is as follows:- Lectures: These classes raise the motivation of the topic and give an overview of the theoretical part. These classes are supported with the use of audiovisual media. Students have a basic bibliography for each topic and additional bibliography for the whole of the subject that allows you to acquire the knowledge. They used power point presentations will be available to students in the Virtual Campus.- Classroom Practices: These sessions will solve theoretical and practical issues related to the knowledge discussed in the lectures. The issues have a strong participatory, as students solve and discuss issues related to the topics covered in the course. In addition to these readings will be discussed related to the issues. Practices for each subject are available in the Virtual Campus.- Group Tutorials: These tutorials will be addressed concerns raised by students. In the group tutorials are also checked for proper development and understanding of content and will focus on literature sources and readings to complement and extend knowledge on specific aspects of the subject. Class work must be supplemented with the following activities to be considered:- Independent work of students, mainly focused on the study of the content taught in class and in the preparation of classroom practices prior to the completion thereof.- As already mentioned, students can access teaching materials necessary for the development of these activities through the Virtual Campus of the University of Oviedo. There you will find available presentations of each topic and lecture notes, recommended readings and / or links to Web pages that will download the readings, problems, practical issues and other related materials.

7. Evaluation of the student's learning results

The evaluation of the course is based on two elements: 1) Continuous assessment, which is measured by the effort and work done by the student throughout the course through different types of individual and group activities. The weight in the final grade is 40%. 2) Final exam, consisting of a test set by which to assess the knowledge acquired by the student and the ability to apply them. The weight of this test in the final grade is 60%. Description of ongoing evaluation activities: Continuous assessment is based on the following elements:- Evidence of monitoring and understanding of the contents analyzed to date of completion of each of the three tests. It will be written tests scheduled for:

- Week of the 12th-16th October 2015
- Week of the 16th-20th November 2015
- Week of the 30th November-3rd December 2015.

The weighting of these three tests is 40%. To pass the course the student must earn a grade of at least 5 points by summing all the weighted scores obtained through continuous assessment and final exam. The weighted score obtained by the student in continuous assessment will be considered in all calls of the academic year. Thus, the final grade, in all calls will be a weighted average of scores on the continuous assessment and final examination with a weighting of 40% continuous assessment. Continuous assessment tests are not repeated in calls extraordinary, but its rating is stored in these calls. Students who choose not to participate in ongoing evaluation activities outlined above and are evaluated necessarily along the course, may pass the subject in any of the calls getting a score of at least 5 points after application the percentage weighting of the final exam (60%) to score on it. The following table shows in summary form, the weights of the various activities that

will undergo continuous assessment evaluation. Weighting assessment tests in the final grade (in percent) Total 40% continuous assessment, Final exam 60% Students benefiting from differentiated assessment may obtain the weighting of continuous assessment as follows: by additional questions and issues that will feed into the final exam for these students

8. Resources, bibliography and complementary documentation

Basic Bibliography:

Fichas del Inversor de la CNMV

Guías Informativas de la CNMV

Martín Marín, J.L.; Trujillo Ponce (2004): Manual de Mercados Financieros, Thomson.

Mishkin, F.; Eakins, S.G. (2012): Financial Markets and Institutions, 7th Edition, Prentice Hall.

Parejo, J.A.; Rodríguez Sáiz, L.; Cuervo García, A. (2011): Manual del sistema financiero español, 23ª edición, Ed. Ariel Economía.

Exercises:

Gómez Ansón, S.; González Méndez, V.M.; Menéndez Requejo, S. (2000): Problemas de dirección financiera, Editorial Civitas.

Menéndez Alonso, E.J. (2004): Problemas y prácticas sobre los mercados financieros, Díaz de Santos.

Additional bibliography:

Allen, F.; Yago, G. (2010): Financing the Future: Market-Based Innovations for Growth, Pearson Prentice Hall.

Amat, O.; Pujades, P.; Lloret, P. (2012): Análisis de operaciones de crédito. Introducción a las técnicas de análisis, confección de informes y seguimientos de las operaciones, 1ª edición, Profit Editorial.

American Finance Association: History of Finance (<http://www.afajof.org/association/historyfinance.asp>)

Arnold, G. (2011): Financial Times Guide to the Financial Markets, FT Press.

Berk, J.; DeMarzo, P. (2011): Corporate Finance: The Core, Pearson.

Bernanke, B.S. (2000): Essays on the Great Depression, Princeton University Press.

Bodie, Z.; Kane, A.; Marcus, A.J. (2010): Essentials of Investments, 8th edition, McGraw Hill. (En español, Principios de inversiones, 5ª edición, 2004, McGraw Hill).

Bodie, Z.; Merton, R.C.; Cleeton, D. (2011): Financial Economics, 2nd Edition, Pearson Learning Solutions (en español: Finanzas, 1ª edición, Pearson).

Brealey, R.A.; Myers, S.C.; Allen, F. (2011): Principles of Corporate Finance, McGraw Hill.

Brun, X.; Elvira, O.; Puig, X. (2008): Mercado de renta variable y mercado de divisas. Las bolsas de valores: mercados de rentas variables y de divisas y las formas de analizarlo, Profit Editorial.

Buckley, A. (2011): Financial crisis. Causes, context and consequences, FT Prentice Hall.

Choudhry, M. (2010): An introduction to bond markets, 4th edition, John Wiley & Sons.

Choudhry, M.; Masek, D. (2011): An introduction to banking, liquidity risk and asset liability management, John Wiley & Sons.

Choudry, M. (2012): The Principles of Banking, John Wiley & Sons.

Codina, J. (2007): Manual de "day-trading" y bolsa "on-line", Inversor ediciones S.L.

Court, E. (2010): Mercado de capitales, Prentice Hall.

Das, S. (2005): Credit Derivatives, CDOs, and Structured Products, Wiley.

Das, S. (2011): Extreme Money, the masters of the Universe and the cult of risk, Financial Times Press.

Elvira, O.; Larraga, P. (2008): Mercado de productos derivados. Futuros, forwards, opciones y productos estructurados, Profit Editorial.

Fabozzi, F.J. (2013): Bond Markets, Analysis and Strategies, 8th edition, Prentice Hall.

- Fabozzi, F.J.; Modigliani, F. (2010): Capital Markets, Institutions and Instruments, 4th Edition, Prentice Hall.
- Fabozzi, F.J.; Modigliani, F.P.; Jones, F.J. (2010): Foundations of Financial Markets and Institutions, 4th edition, Prentice Hall.
- Friedman, M.; Schwartz, A.J. (1963): A monetary history of United States 1867-1960, Princeton University Press.
- Galbraith, J.K. (2008): El crash de 1929, Editorial Ariel.
- Hull, J. (2012): Risk management and financial institutions, 3rd edition, John Wiley & Sons.
- Hull, J.C. (2011): Fundamentals of Futures and Options Markets, 7th Edition, Prentice Hall (en Español: Introducción a los Mercados de Futuros y Opciones, 6ª Edición, Prentice Hall)
- Hull, J.C. (2012): Options, Futures and other derivatives, 8th Edition, Prentice Hall.
- Igual, D. (2008): Conocer los productos y servicios bancarios. Productos de tesorería, de inversión, de financiación, leasing, factoring, renting, tarjetas, Profit Editorial.
- Kindleberger, C.P.; Aliber, R. (2005): Manias, panics and crashes. A history of financial crises, 5th edition, Wiley Investment Classics.
- Lamothe Fernández, P. (2010): Opciones financieras y productos estructurados, McGraw Hill.
- Lamothe, P. (1999): Gestión de carteras de acciones internacionales, Pirámide.
- Larraga, P. (2008): Mercado monetario y mercado de renta fija, Profit Editorial.
- Larraga, P.; Peña, I. (2008): Conocer los productos financieros de inversión colectiva, Profit Editorial.
- López Lubián, F.J; García Estévez, P. (2003): Bolsa, Mercados y Técnicas de Inversión. McGraw-Hill.
- Madura, J. (2010): Financial institutions and markets, 9th edition, South Western Publishing.
- Marín, J.M.; Rubio, G. (2001): Economía Financiera, Antoni Bosch Editor (nueva edición en 2011).
- Martín López, M.; Martín Marín, J.L.; Oliver Alfonso, M.D.; Torre Gallegos, A. (2009): Manual práctico de mercados financieros, 1ª edición, Delta.
- Martín, M.; Martín, J.L.; Oliver, Mª D.; de la Torre, A. (1995): La operativa en los mercados financieros: casos prácticos, Ariel Economía.
- Meir, S. (2011): What Investors Really Want: Know What Drives Investor Behavior and Make Smarter Financial Decisions, 1st Edition, McGraw Hill
- Menéndez Alonso, E. (2002): 500 Cuestiones resueltas sobre las Bolsas de Valores, Díaz de Santos.
- Mishkin, F.S. (2012): Economics of Money, Banking and Financial Markets, 10th Edition, Prentice Hall. (Edición en español: Moneda, banca e instituciones financieras 8ED, 2008).
- Pindado García, J. (2012): Finanzas Empresariales, Editorial Paraninfo.
- Ramírez, J. (2011): Handbook of Corporate Equity Derivatives and Equity Capital Markets, John Wiley & Sons.
- Roland, G. (2010): Market players: A guide to the institutions in today's financial markets, John Wiley & Sons.
- Sánchez Fernández de Valderrama, J.L. (2007): Curso de bolsa y mercados financieros, 4ª edición, Ed. Ariel.
- Saunders, A.; Cornett, M.M. (2009): Financial Markets and Institutions, Mc Graw Hill.
- Scaramucch, A. (2012): The little book of hedge funds, John Wiley & Sons.
- Shiller, R.: Financial Markets (<http://academicearth.org/courses/financial-markets>)
- Links a páginas web de interés para la asignatura
- Ahorro y Titulización: www.ahorroytitulizacion.com
- Asociación Española de la Banca: www.aebanca.es
- Asociación Española de Contabilidad y Administración de Empresas (AECA): <http://www.aeca.es/>
- Association for Investment Management and Research: <http://www.aimr.com/>
- Autoridad Bancaria Europea; European Banking Authority (EBA): www.eba.europa.eu/
- Autoridad Europea de Seguros y Fondos de Pensiones; European Insurance and Occupational Pensions Authority (EIOPA): www.eiopa.europa.eu
- Autoridad Europea de Valores y Mercados; European Securities and Markets Authority (ESMA): www.esma.europa.eu/

BaFIN: www.bafin.de
Banco Central Europeo: www.ecb.int
Banco de España: www.bde.es
Banco Mundial: www.worldbank.org
Banco Santander: www.bancosantander.es
Banco Bilbao Vizcaya Argentaria: www.bbva.es
Bank of England: <http://www.bankofengland.co.uk/Pages/home.aspx>
Blog Nada es Gratis de FEDEA: www.nadaesgratis.es Blog Random Thoughts de Xavier Sala i Marti: www.salaimartin.com/random-thoughts/random-thoughts.html
Bloomberg: www.bloomberg.com
BME Renta Fija/AIAF/: www.aiaf.es
Bolsa de Madrid: www.bolsamadrid.es
Bolsas y Mercados Españoles (BME): www.bolsasymercados.es
Chicago Mercantile Exchange (CME Group): <http://www.cmegroup.com/>
Comisión Europea, Internal Markets, Financial Services and Capital: http://ec.europa.eu/internal_market/top_layer/financial_capital/index_en.htm
Comisión Nacional del Mercado de Valores: www.cnmv.es
Confederación Española de Cajas de Ahorros: www.ceca.es
Deutsche Bank: www.db.com
Deutsche Bundesbank: <http://www.bundesbank.de/>
Deutsche Börse: www.deutsche-boerse.com
Diario Cinco Días: www.cincodias.com Diario Digital Banca15: www.banca15.com
Diario Digital Finanzas.com: www.finanzas.com
Diario El Economista: www.eleconomista.es/
Diario El Confidencial: www.elconfidencial.com
Diario Expansión: www.expansion.com
Dirección General de Seguros y Planes de Pensiones: www.dgsfp.meh.es
Dow Jones: <http://www.dowjones.com/>
Dow Jones Sustainability Indexes: <http://www.sustainability-index.com/>
European Capital Markets Institute: www.eurocapitalmarkets.org
European Central Bank: www.ecb.int
Federación Europea de Bolsas de Valores: www.fese.be/en/
Federación Mundial de Bolsas: www.world-exchanges.org
FTSE, The Index Company: <http://www.ftse.com/>
Financial Services Authority: <http://www.fsa.gov.uk/>
Financial Times: www.ft.com/markets
Fitch Ratings: www.fitchratings.com
Fitch Ratings España: www.fitchratings.es
Fondo de Adquisición de Activos Financieros: <http://www.fondoaaf.es/SP/index.html>
Fondo de Garantía de Depósitos: <http://www.fgd.es/es/index.html>

Fondo de Reestructuración Ordenada Bancaria (FROB): <http://www.frob.es/>
Fondo Monetario Internacional: www.imf.org/external/index.htm
Fundación de Estudios de Economía Aplicada: www.fedea.es
HSBC: www.hsbc.com
Iberclear: www.iberclear.es
Instituto Español de Analistas Financieros: www.ieaf.es
Investor Protection Trust: <http://www.investorprotection.org/>
JP Morgan: <http://www.jpmorgan.com/>
London Stock Exchange: www.londonstockexchange.com
Mercado Español de Futuros Financieros: www.meff.es
Merril Lynch: www.ml.com
Ministerio de Economía y Competitividad: www.mineco.gob.es
Moody's: www.moodys.com
Moody's España: www.moodys.es
NASDAQ Stock Market: www.nasdaq.com
National Association of Security Dealers: <http://www.nasdr.com/>
North American Securities Administrators Association: <http://www.nasaa.org>
NYSE Euronext: <http://www.nyse.com/>
Organización de Cooperación y Desarrollo Económico (OCDE): www.oecd.org
Organización Internacional de Comisiones de Valores: www.iosco.org
Reserva Federal de los Estados Unidos: www.federalreserve.gov
Reuters España: www.reuters.es
Reuters: www.reuters.com
Revista Economistas: www.revistaeconomistas.com
Royal Bank of Scotland: <http://www.rbs.co.uk/>
Seminario Actualidad Económica: www.actualidad-economica.com/
Sociedad de Bolsas: www.sbolsas.com
Standard & Poor's: www.standardandpoors.com
Tesoro Público: www.tesoro.es
Tokio Stock Exchange: www.tse.or.jp/english
Toronto Stock Exchange: <http://www.tmx.com/en/index.html>
Unión Nacional de Cooperativas de Crédito: www.unacc.com
Universia Knowledge Wharton: <http://www.wharton.universia.net/i>
U.S. Securities and Exchange Commission: <http://www.sec.gov/>
Web de capital riesgo: www.webcapitalriesgo.com
Wall Street Journal: www.wsj.com
Xavier Sala i Martí (artículos): <http://www.salaimartin.com/mass-media.html>

Subject Guide

1. Information about the subject

| | | | | |
|-----------------------------------|--|-------------------------|--|----------------|
| SUBJECT | Inversiones Financieras/Financial Investments | | CODE | GADEMP01-3-006 |
| EDUCATIONAL OFFER | Graduado o Graduada en Administración y Dirección de Empresas Degree in Business Administration | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | Nº TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| LECTURERS | | EMAIL | | |
| GONZALEZ MENDEZ VICTOR MANUEL | | vmendez@uniovi.es | | |
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2. Context

Financial Investments is the last of the three compulsory subjects of the Finance module of the Degree in Management and Business Administration. Previously students have studied *Corporate Finance* (compulsory subject of the 2nd semester of the second year) and *Markets and Financial Institutions* (compulsory subject of the 1st semester of the third year).

This subject is coordinated with the other subjects of the Finance module and multiple interactions exist among them. *Corporate Finance* has the aim of studying the investment decisions, financing and dividend distribution policy adopted by companies given the financial objective of creating value in the company. The subject *Markets and Financial Institutions* analyzes the different agents, markets and financial system which constitute the financial environment in which firms make their financial decisions. In addition, *Financial Investments* is also related to other Finance elective modules (*Financial Risk Management* and *Financial Analysis and Planning*) to develop in depth issues related to the financial management of enterprises.

3. Requirements

There are no mandatory requirements to take this subject, although mastery of the content matter of the subjects *Corporate Finance* and *Markets and Financial Institutions*, compulsory subjects of the second and third year, respectively, in the Degree in Management and Business Administration (ADE) is considered appropriate. The reason is that the former subject gives students an overview of corporate financial decisions, while the latter provides knowledge about the financial environment in which firms make their financial decisions. It is likewise advisable to have knowledge of the financial information that companies draw up, as well as knowledge of financial mathematics. Moreover, as an instrumental aid, some training in the management of basic computer programs and the Internet is recommendable, as this facilitates reference consultation, organization, processing and presentation of information to be managed by students. Of course, prior knowledge of English is very important. This subject forms part of the Bilingual Itinerary which offers students the opportunity to study a substantial part of their subjects in English and take part in mobility programmes at foreign universities, where they can continue their education in this language.

4. Competencies and learning results

The aim of this subject is the study of capital markets, providing students with the capacity to use different methods of valuation of equity, debt and financial derivatives within the context of portfolio management. The analysis comes from the knowledge of the existing financial investments and from the study of the relationship between return and risk of financial assets and Portfolio Theory. The Markowitz Model, the market model, CAPM and Arbitrage Valuation Models (APT) are studied, with special emphasis on the relationship between risk and return and the fundamentals of portfolio diversification. Subsequently, after the analysis of the efficiency of the stock markets, different models of financial assets valuation are examined; not only equity, but also debt. The subject is completed with the study of financial derivatives, futures and financial options in portfolio management.

The **general skills** students acquire in the subject *Financial Investments* are:

- Ability to analyze and synthesize
- Learning ability
- Ability to communicate fluently (both orally and in writing) in English
- Knowledge and understanding of English
- Ability to search for and analyze information sources in the workplace
- Ability to work as a team
- Ability to make decisions
- Ability to put knowledge into practice

- Ability to find creative novel ideas and solutions
- Initiative and entrepreneurial spirit
- Ability to organize and plan
- Ability to adapt to new situations
- Concern for quality and a job well done
- Values and ethical behaviour

The **specific skills** students will acquire in the *Financial Investments* subject are:

- Manage and interpret specific software for data processing
- Assess the suitability of investment projects and the most appropriate funding
- Design, develop and analyze business plans
- Transfer information, ideas, problems and solutions in the field of business management to both skilled and unskilled audiences
- Issue advisory reports on specific situations of companies and markets

Learning Outcomes. At the end of the module, students should be able to:

- Identify the relevant parameters for the valuation of assets
- Understand operations in financial markets
- Look for, analyze and interpret information on financial markets

- Identify and understand the different types of financial risks, as well as hedging strategies
- Understand the methodologies of financial assets valuation: equity and debt.
- Understand the techniques for creating and optimizing portfolios and for the diversification of risk
- Analyze and describe price formation processes in financial markets
- Understand financial decision-making by economic agents

In short, the subject not only provides specialized training in matters of financial assets and the basis for understanding other Finance-related subjects, but also promotes employment in a professional career related to the financial markets, financial assets and investment decisions.

5. Contents

The course guide is divided into 7 chapters grouped into three parts. The initial introductory chapter is aimed at understanding the financial assets for investors to choose, the analysis of the relationship between risk and return of financial assets and the influence of diversification over the binomial risk-return. The second part includes two chapters based on Portfolio Theory and the efficiency of capital markets, respectively. Finally, the third part includes Chapters 4 through to 7 and is devoted to analysing investments in equity, debt and financial derivatives, respectively.

5.1. Abbreviated Program

Part I: Introduction

Chapter 1. Investments and Financial Markets

Part II: Equilibrium and Efficiency in Capital Markets

Chapter 2. Portfolio Theory

Chapter 3. The Efficiency of Capital Markets

Part III: Analysis of Financial Investments

Chapter 4. Fundamental Analysis of Stocks

Chapter 5. Technical Analysis of Stocks

Chapter 6. Bond Valuation and Management

Chapter 7. Financial Derivative Instruments: Futures and Options

5.2. Detailed programme and learning objectives

Chapter 1.- Investments and Financial Markets

Contents:

1.1.- Financial Assets: concept and types

- 1.2.- Financial markets and Investors
- 1.3.- Return on Financial Investments
- 1.4.- Risk in Financial Investments
- 1.5.- Portfolio Management: Diversification

Objectives:

The aim of the chapter is to understand the financial assets available for investors and the markets where these are negotiated. Moreover, the risk/return relationship in financial assets will be analyzed. This chapter also analyzes the influence that portfolio management has on the return and risk of financial investments through diversification.

The specific learning objectives are the following:

- § Become acquainted with investments and financial markets
- § Define return and risk in individual assets
- § Become acquainted with the determinants of risk in financial asset portfolios
- § Calculate the return and risk of a financial assets portfolio
- § Understand the concept of diversification

Bibliography:

BODIE, Z.; KANE, A.; MARCUS, A.J. (2011): Investments. Ninth edition. Ed. McGraw Hill.

JORDAN, B.D.; MILLER, T.W. Jr. (2009): Fundamentals of investments. Valuation and Management. Fifth edition. Ed. McGraw Hill.

LEVY, H. (1999): Introduction to Investments. Second edition. South-Western College Publishing.

Chapter 2.- Portfolio Theory

Contents:

- 2.1.- The Markowitz or Mean/Variance Model
- 2.2.- The Market Model: the simplification of Sharpe
- 2.3.- Systematic and Specific Risk
- 2.4.- Capital Asset Pricing Model: CAPM

2.5.- Index Models and APT

2.6.- Evaluation of the results of asset portfolios

Objectives:

This chapter analyses the relationship between return and risk within the context of portfolio theory, studying the Markowitz or mean/variance model, the market model and the CAPM and APT models. Finally, the results of asset portfolios will be analyzed through the proposal of measures that jointly consider the portfolio's risk and return.

The specific learning objectives are the following:

- Become acquainted with the fundamentals of the Markowitz model, the market model and the CAPM and APT models
- Understand the implications of Portfolio Theory
- Distinguish and calculate the components of total risk: specific and systematic
- Evaluate the portfolio's results

Bibliography:

BODIE, Z.; KANE, A.; MARCUS, A.J. (2011): Investments. Ninth edition. Ed. McGraw Hill.

JORDAN, B.D.; MILLER, T.W. Jr. (2009): Fundamentals of investments. Valuation and Management. Fifth edition. Ed. McGraw Hill.

LEVY, H. (1999): Introduction to Investments. Second edition. South-Western College Publishing.

Chapter 3.- The Efficiency of Capital Markets

Contents:

- 3.1.- Definition and Implications
- 3.2.- The Efficiency Hypotheses
- 3.3.- Contrast and Evidence of the Efficiency Hypotheses
- 3.4.- Anomalies in the Stock Markets
- 3.5.- Active versus Passive Management

Objectives:

The aim of this chapter is the study of the efficiency of stocks markets and its implications, distinguishing three levels of efficiency in terms of the information contained in prices: weak, semi-strong and strong levels of efficiency. The evidence that supports and contradicts the efficiency of the stock markets will be analyzed. Finally, the consequences that stock market efficiency has on portfolio management will also be evaluated.

The specific learning objectives are the following:

- Become acquainted with the fundamentals of stock market efficiency
- Analyze the reasons motivating the degree of stock market efficiency
- Distinguish the different levels of efficiency
- Become acquainted with and evaluate the contrasts of efficiency hypotheses
- Become acquainted with and evaluate the existing anomalies in the stock markets

Understand the implications of efficiency in the management of financial assets

Bibliography:

BODIE, Z.; KANE, A.; MARCUS, A.J. (2011): Investments. Ninth edition. Ed. McGraw Hill.

BREALEY, R.; MYERS, S.; ALLEN, F. (2011): *Principles of Corporate Finance*. Ed. McGraw Hill. Tenth edition

BREALEY, R.; MYERS, S.; MARCUS, A. (2009): Fundamentals of Corporate Finance, 6/e. Ed. McGraw Hill.

JORDAN, B.D.; MILLER, T.W. Jr. (2009): Fundamentals of investments. Valuation and Management. Fifth edition. Ed. McGraw Hill.

LEVY, H. (1999): Introduction to Investments. Second edition. South-Western College Publishing.

Chapter 4.- Fundamental Analysis of Stocks

Contents:

- 4.1.- Information used in Fundamental Analysis
- 4.2.- Dividend Discount Models
- 4.3.- Models based on Multipliers: Earnings-Price Ratio
- 4.4.- Models based on discounted cash flows

Objectives:

The aim of this chapter is to study the different methods of valuation of stocks. These models are based on the available information for this valuation: macroeconomic information, industry information and corporate information. The different available models for estimating the intrinsic value of assets and their practical implementation are then proposed.

The specific learning objectives are the following:

- Become acquainted with the sources of information for fundamental analysis: macroeconomic, industry and corporate information
- Analyze the main corporate magnitudes: return and solvency
- Understand the fundamentals of the dividend discount model, the methods based on multipliers (PER) and the discounted cash flows model

- Become acquainted with the concept of risk premium and its influence on valuation
- Apply this knowledge to the valuation of common stocks

Bibliography:

BODIE, Z.; KANE, A.; MARCUS, A.J. (2011): Investments. Ninth edition. Ed. McGraw Hill.

BREALEY, R.; MYERS, S.; ALLEN, F. (2011): *Principles of Corporate Finance*. Ed. McGraw Hill. Tenth edition

BREALEY, R.; MYERS, S.; MARCUS, A. (2009): Fundamentals of Corporate Finance, 6/e. Ed. McGraw Hill.

JORDAN, B.D.; MILLER, T.W. Jr. (2009): Fundamentals of investments. Valuation and Management. Fifth edition. Ed. McGraw Hill.

LEVY, H. (1999): Introduction to Investments. Second edition. South-Western College Publishing.

Chapter 5.- Technical Analysis of Stocks

Contents:

5.1.- Definition and Categories

5.2.- Types of Charts

5.3.- Dow Theory

5.4.- Main Chart Patterns and Indicators

Objectives:

This chapter examines the technical analysis of stocks and its usefulness when adopting financial decisions. The chapter begins by reviewing the main theories, concepts and purposes in this type of analysis. It then focuses on the tools, chart patterns and other relevant indicators used by investors.

The specific learning objectives are the following:

- Understand the foundations of Technical Analysis and its usefulness
- Become acquainted with and apply the main tools and techniques in this type of analysis and its usefulness for financial policy
- Identify the most relevant chart patterns used in technical analysis
- Apply indicators such as Momentum or the Relative Strength Index (RSI)

Bibliography:

BODIE, Z.; KANE, A.; MARCUS, A.J. (2011): Investments – Global Edition. Ed. McGraw Hill. Chapter 12.

JORDAN, B.D.; MILLER T.W.Jr. (2009): Fundamentals of Investments: Valuation and Management. Ed. McGraw Hill. Chapter 8.

MURPHY, J. (1999): Technical Analysis of the Financial Markets. New York Institute of Finance.

Chapter 6.- Bond Valuation and Management

Contents:

- 6.1.- Bond basics
- 6.2.- Pricing bonds
 - 6.2.1.- The Term Structure of Interest Rates
- 6.3.- Bond risk
- 6.4.- Duration
- 6.5.- Passive and active bond management strategies

Objectives:

This chapter addresses the valuation of bonds, bearing in mind the future cash flows of the bond and the yield to maturity that will be a function of the level of risk. The goal of this chapter is also to analyze the risk associated with changes in the interest rate and to discern how investors can develop strategies to invest in bonds.

The specific learning objectives are the following:

- Become acquainted with the determinants of bond prices
- Understand the theories that explain the term structure of interest rates
- Identify the different bond risks
- Become aware of how duration is used to manage interest rate risk
- Design bond management strategies

Bibliography:

BODIE, Z.; KANE, A.; MARCUS, A.J. (2011): Investments. Ninth edition. Ed. McGraw Hill. Chapters 9 and 10.

JORDAN, B.D.; MILLER, T.W. Jr. (2009): Fundamentals of investments. Valuation and Management. Fifth edition. Ed. McGraw Hill. Chapters 9 and 10.

LEVY, H. (1999): Introduction to Investments. Second edition. South-Western College Publishing. Chapters 16 and 17.

Topic 7.- Financial Derivative Instruments: Futures and Options

Contents:

7.1.- Concept and Characteristics of Financial Derivative Instruments

7.2.- Financial Futures

7.2.1.- Valuation

7.2.2. Strategies with futures

7.3.- Financial Options

7.3.1.- Valuation

7.3.2.- Strategies with options

Objectives:

The fundamental goal in this chapter is the study of financial derivative instruments (futures and options) and their usefulness in portfolio management. After studying the characteristics of these contracts, the factors that determine their price will be analyzed, as well as the models used for futures and options valuation. Finally, the most frequent strategies with futures and options will be analyzed. These strategies range from hedging through to speculation, as well as including arbitrage between markets.

The specific learning objectives are the following:

- Become acquainted with the characteristics of the futures contract and the determinant of its price
- Understand the valuation of futures
- Design investment strategies in futures in line with the investor's objective
- Become acquainted with the characteristics of an option contract and the determinant of its price
- Understand the models of valuation of options
- Design investment strategies in options in line with the investor's objective

Bibliography:

BODIE, Z.; KANE, A.; MARCUS, A.J. (2011): Investments. Ninth edition. Ed. McGraw Hill.

JORDAN, B.D.; MILLER, T.W. Jr. (2009): Fundamentals of investments. Valuation and Management. Fifth edition. Ed. McGraw Hill.

LEVY, H. (1999): Introduction to Investments. Second edition. South-Western College Publishing.

6. Methodology and working plan

The programme structure of the subject is implemented through classroom activities as well as distance learning work. Teaching is based on two types of activities: lectures and classroom practical exercises, through weekly sessions lasting an hour and a half. These activities are combined with group tutoring sessions.

For the development of each topic of the subject, students may attend lectures, which will provide them their first contact with the subject. They will also be given a course guide of the subject in this first session. This will include case studies, an additional reading list (articles of a theoretical and practical nature) and work plans to be carried out by students, either individually or in teams. The weight of each of these assignments will depend on the specific topic to be developed in the class session. In any case, the aim is to promote practical learning for the acquisition of the aforementioned skills. This practical training will take place through exercises and problem solving, focusing on further study and understanding of financial decision making, looking for financial information on financial assets and conducting individual and group work on management and investment decisions in financial assets.

Within this context, the work plan for classroom activities is structured as follows:

- Lectures: These classes will raise motivation for the topic and give an overview of its underlying theory. They are supported by the use of audio-visual media. Students will be given a basic reading list and other additional materials to acquire theoretical knowledge.
- Practical exercises in the classroom: These sessions will solve theoretical and practical issues related to the knowledge presented in the lectures. The participation of the students is prerequisite, as they will be required to solve and discuss issues concerning the measurement of the return and risk of investments, portfolio formation, the understanding of the effect of diversification, the valuation of financial assets—stocks and bonds— and the use of derivatives in portfolio management.
- Group tutorials: These tutorials will be based on the solving of questions raised by students. In the group tutorials, proper development and understanding of the subject matter will be supervised, group work will be monitored and further focus will be given to bibliographical sources and reading material to complement and extend knowledge on specific aspects of the subject. A closer proximity to students will enable attention to diversity and the focussing on initiative and concerns in order to improve the analytical and critical skills in students.

Classwork is to be combined with the following activities:

- Autonomous work by the student mainly focusing on the study of the subject matter taught in class and on the preparation of classroom practical exercises in advance.

- Teamwork on a topic or subject related to the subject matter aimed at helping students improve their skills and abilities related to teamwork, the pursuit of information and their capacity to analyze and synthesize content, argue and display their knowledge.

Students will be able to access teaching materials required for the development of these activities on the University of Oviedo's Virtual Campus. Here, they will find class notes, reading lists, problems, practical exercises and other related materials. The number of hours devoted to classroom activities (in-class work) and to distance learning work is shown in the following table:

| | | IN-CLASS WORK | | | | | | | DISTANCE LEARNING WORK | | | |
|-----------------|--------------------|-----------------|---|--|---|------------------------|----------------------------|----------------------------|------------------------|-------------------|------------------------|--------------|
| <i>Chapters</i> | <i>Total hours</i> | <i>Lectures</i> | <i>Practical exercises in the classroom</i> | <i>Lab practicals/ fieldwork/ ICT/ languages</i> | <i>Clinical and hospital practicals</i> | <i>Group Tutorials</i> | <i>External practicals</i> | <i>Assessment sessions</i> | <i>Total</i> | <i>Group work</i> | <i>Individual work</i> | <i>Total</i> |
| Chapter 1 | 10.5 | 3 | 1.5 | | | 0,5 | | | 4.5 | 1 | 5 | 6 |
| Chapter 2 | 35 | 6 | 6 | | | 1,5 | | | 13 | 4 | 18 | 22 |
| Chapter 3 | 11.5 | 2 | 1.5 | | | | | | 3.5 | 2 | 6 | 8 |
| Chapter 4 | 26 | 4 | 3 | | | 1,5 | | | 8 | 2 | 16 | 18 |
| Chapter 5 | 16 | 2 | 1 | | | 0,5 | | | 3 | 5 | 8 | 13 |
| Chapter 6 | 23 | 3 | 4 | | | | | | 8 | 3 | 12 | 15 |

| | | | | | | | | | | | | |
|--------------|------------|-----------|-----------|--|--|----------|--|----------|-----------|-----------|-----------|-----------|
| Chapter 7 | 23 | 3 | 4 | | | | | | 8 | 3 | 12 | 15 |
| Exam | 5 | | | | | | | 5 | 5 | | | |
| Total | 150 | 23 | 21 | | | 4 | | 5 | 53 | 20 | 77 | 97 |
| | | | | | | | | | | | | |

| | | Hours | % | Total |
|------------------------|---|-------|-------|-------|
| In-Class Work | Lectures | 23 | 15,33 | 35,33 |
| | Practical exercises in the classroom | 21 | 14,00 | |
| | Lab Practicals/Fieldwork/ ICT/ languages | | | |
| | Clinical and hospital practicals | | | |
| | Group tutorials | 4 | 2,67 | |
| | External Practicals | | | |
| | Assessment Sessions | 5 | 3,33 | |
| Distance Learning Work | Group work | 20 | 13,33 | 64,67 |
| | Individual work | 77 | 51,33 | |

| | | | | |
|--|-------|-----|--|--|
| | Total | 150 | | |
|--|-------|-----|--|--|

The following is an indicative distribution schedule of the subject matter over the weeks of second semester:

| Week | IN-CLASS WORK | DISTANCE LEARNING WORK |
|--------|---|--|
| Week 1 | Introduction to the subject. Chapter 1 Organization of practices | Study of Chapter 1 Readings from the economic press |
| Week 2 | Chapter 2 (Section 1) Discussion of readings Chapter 1 Comment on stock exchange information | Study of Chapter 2 Readings preparatory work |
| Week 3 | Chapter 2 (Section 2) Practice in Computer Room Solving Exercises Chapter 2 | Study of Chapter 2 Readings preparatory work |
| Week 4 | Chapter 2 (Section 3) Practice in Computer Room | Study of Chapter 2 Work on risk-return estimation |
| Week 5 | Chapter 2 (Sections 4, 5 & 6) Solving Exercises Chapter 2 | Study of Chapter 2 Work on risk-return estimation |

| | | |
|---------|---|---|
| Week 6 | Chapter 3 (Sections 1,2 & 3) Solving Exercises Chapter 2 | Study of Chapter 3 ReadingsChapter 3 |
| Week 7 | Chapter 3 (Sections 4 & 5) and Chapter 4 (Section 1) Discussion: Readings Chapter 3 | Study of Chapter 3 Solving the proposed cases. |
| Week 8 | Chapter 4 (Sections 1 & 2) Solving exercises Chapter 4 | Study of Chapter 4 Look for information about fundamental analysis |
| Week 9 | Chapter 4 (Sections 3 & 4) Solving exercises Chapter 4 | Study of Chapter 4 Work of Fundamental Analysis |
| Week 10 | Chapter 5 (Sections 1,2, 3 & 4) Solving exercises Chapter 5 | Study of Chapter 5 Work of Technical Analysis |
| Week 11 | Chapter 6 (Sections 1, 2 & 3) Solving exercises Chapter 6. | Study of Chapter 6 Solving proposed cases and exercises |
| Week 12 | Chapter 6 (Sections 4 & 5) Solving exercises Chapter 6. | Study of Chapter 6 Solving proposed cases and exercises |
| Week 13 | Chapter 7 (Sections 1& 2) Solving exercises Chapter 7. | Study of Chapter 7 Solving proposed cases and exercises |
| Week 14 | Chapter 7 (Section 3). Solving exercises Chapter 7. Concluding remarks and overview of the subject. | General overview of the subject |

7. Evaluation of the student's learning results

The evaluation of the subject is based on two elements:

- 1) **Continuous assessment**, which is based on the effort and work of students throughout the subject through different types of individual activities. The weight of the final mark is 40%.
- 2) **Final exam** which consists of a test set via which the knowledge acquired by students and their ability to apply it to investment decisions is assessed. The weight of this test in the final mark is 60%.

Description of ongoing evaluation activities:

Continuous assessment is based on the following elements:

- Conducting a series of follow-up tests without prior notice, where questions will be asked about aspects of the topic under discussion in class or will be given a practical exercise similar to those previously seen in class to solve. Continuous assessment raises issues or practical exercises discussed in previous sessions, thus evaluating students. For this reason, these tests cannot be retaken as extraordinary exams. The marks obtained during unannounced continuous assessments will be maintained. Each unannounced assessment will have a mark of less than one point (1 point), 2.5 being the maximum possible total points obtained through this continuous assessment. Students can obtain additional points based on their participation in class that will be added to those points obtained in the unannounced follow-up tests, i.e. to the aforementioned maximum of 2.5 points.
- Group work on issues or questions related to the subject matter to be proposed by or agreed on with the teacher. This allows students to interact and discuss with other students and thus improve their skills and abilities related to teamwork, the pursuit of information and the skills of analyzing and synthesizing content, arguing and communicating. There will be two works in team proposed during the Group Tutorials. The first work consists on the analysis of risk and return for a stock quoted on the Spanish capital market. The second work put in practice the knowledge about Fundamental Analysis and Technical Analysis from Chapter 4 and 5. The maximum mark that each student can obtain is 1.5 points and, due to its particular nature, this activity cannot be retaken in the extraordinary exams.

8. Resources, bibliography and complementary documentation

BODIE, Z.; KANE, A.; MARCUS, A.J. (2011): Investments. Ninth edition. Ed. McGraw Hill.

BREALEY, R.; MYERS, S.; ALLEN, F. (2011): *Principles of Corporate Finance*. Ed. McGraw Hill. Tenth edition

BREALEY, R.; MYERS, S.; MARCUS, A. (2009): *Fundamentals of Corporate Finance*, 6/e. Ed. McGraw Hill.

JORDAN, B.D.; MILLER, T.W. Jr. (2009): *Fundamentals of investments. Valuation and Management*. Fifth edition. Ed. McGraw Hill.

LEVY, H. (1999): *Introduction to Investments*. Second edition. South-Western College Publishing.

ROSS, S.A.; WESTERFIELD, R.W. & JORDAN, B.D. (2010): *Fundamentals of Corporate Finance*, 9/e. Ed. McGraw-Hill.

Financial Websites:

| | |
|---|---|
| Bolsas y Mercados Españoles (BME) | |
| Bolsa de Madrid | www.bolsamadrid.es |
| Comisión Nacional del Mercado de Valores | www.cnmv.es |
| Sociedad de Bolsas | www.sbolsas.com |
| Banco de España | www.bde.es |
| Securities Exchange Commission (SEC) | www.sec.gov |
| Información Regulada Autoridades Financieras (Europa) | http://www.esma.europa.eu/page/oams |
| Yahoo Finanzas | http://es.finance.yahoo.com/ |
| Google Finance | http://www.google.com/finance |
| Cinco Días | www.cincodias.com |
| Expansión | www.expansion.com |
| El Economista | www.eleconomista.es |

Subject Guide

1. Information about the subject

| | | | | |
|--------------------------|---|-------------------------|--|----------------|
| SUBJECT | Diseño Organizativo/Organization Design | | CODE | GADEMP01-3-007 |
| EDUCATIONAL OFFER | Graduado o Graduada en Administración y Dirección de Empresas Degree in Business Administration and Management | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | Nº TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
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| LECTURERS | | EMAIL | | |
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| VAZQUEZ BUSTELO DANIEL | | dvazquez@uniovi.es | | |
| GARCIA CANAL ESTEBAN | | egarcia@uniovi.es | | |

2. Context

Organization Design is included in the Organization and Management module and, more specifically, it is classified under the General Management label in the bachelor's degree in Business Management and Administration. The objective of the course is twofold: first, to make the student understand the functioning of business organizations; and, second to introduce the basic concepts needed to design, implement and change the organizational structure of business organizations.

3. Requirements

Basic notions of Business Administration are required; the ones that are typically taught in the "Introduction to Business" subject.

4. Competencies and learning results

1. General competences:

- Concern for quality and good work.
- Analysis and synthesis skills.
- Skills at searching for and analyzing information in the working environment.
- Ability to work autonomously.
- Ability to organize and plan.
- Knowledge and understanding of other languages, mainly English.
- Ability to find/identify new ideas and solutions.
- Decision-making.
- Criticism and self-criticism skills.
- Team-working skills.
- Ability to apply theoretical knowledge to practice.
- Adaptation skills.

2. Specific competences:

- To understand the economic and institutional environment and its impact on business decisions.
- Organizational design skills.
- The planning and management of human resources.
- To design and to develop business plans.
- To transmit information, ideas, problems and solutions in the area of business management to a specialized and to a non-specialized audience.
- The issuing of advisory reports on specific firms and markets situations.

3. Learning outcomes:

- Ability to organize teams.
- Ability to identify coordination and motivation problems within an organization.
- Ability to analyze the soundness of the organizational structure of a company.
- Ability to understand and overcome the main changes that entail the management of change inside an organization.

5. Contents

Summary of contents

PART I:INTRODUCTION

LESSON 1.- Organizations and organizational structure

PART II: THE DESIGN PARAMETERS

LESSON 2.- Design of individual positions

LESSON 3.- Design of the superstructure

LESSON 4.- Design of lateral linkages

LESSON 5.- Decentralization

PART III: ORGANIZATION DESIGN IN PRACTICE

LESSON 6.- Contingency factors

LESSON 7.- Structural configurations

LESSON 8.- Organizational change

Detailed contents and learning objectives

PART I: INTRODUCTION

LESSON 1.- Organizations and organizational structure

1.1. Business organizations: concept and distinctive features

1.2. Organizational structure and the parts of the organization

Readings:

Mintzberg, H. (1983): Structure in Fives: Designing Effective Organizations, 1st ed., Prentice-Hall. Chapter 1.

PART II: THE DESIGN PARAMETERS

LESSON 2.- Design of individual positions

2.1. Introduction

2.2 Unskilled positions

2.3 Professional positions

2.4 Corporate culture and organizational design

Readings:

Mintzberg, H. (1983): Structure in Fives: Designing Effective Organizations, 1st ed., Prentice-Hall. Chapter 2.

Gómez Mejía L. R., Balkin D. B. and R. L. Cardy (2001): Dirección y Gestión de Recursos Humanos, 3ª ed. Prentice Hall, Madrid, Chapter 2 (pp. 55-90).

LESSON 3.- Design of the superstructure

3.1. Departmental (unit) size

3.2. Grouping criteria

Readings:

Mintzberg, H. (1983): Structure in Fives: Designing Effective Organizations, 1st ed., Prentice-Hall. Chapter 3.

LESSON 4.- Design of lateral linkages

4.1. Planning and control systems

4.2. Liaison (linking) Devices

Readings:

Mintzberg, H. (1983): Structure in Fives: Designing Effective Organizations, 1st ed., Prentice-Hall. Chapter 4.

Kaplan, R. and D. Norton (2001): Cuadro de mando integral, Ed. Gestión 2000.

LESSON 5.- Decentralization

5.1. Introduction

5.2. Five types of decentralization

Readings:

Mintzberg, H. (1983): Structure in Fives: Designing Effective Organizations, 1st ed., Prentice-Hall. Chapter 5.

PART III: ORGANIZATION DESIGN IN PRACTICE

LESSON 6.- Contingency Factors

6.1. Age and size

6.2. Environment

6.3. Technology and organization structure

Readings:

Mintzberg, H. (1983): Structure in Fives: Designing Effective Organizations, 1st ed., Prentice-Hall. Chapter 6.

Daft, R. L. (2005): Teoría y Diseño Organizacional, 8ª ed., Thomson, México, chapters 4, 7, 8 and 9.

LESSON 7.- Structural configurations

7.1. Bureaucratic structures

7.2. Innovation-oriented (organic) structures

7.3. Organizing the diversified firm

Readings:

Mintzberg, H. (1983): Structure in Fives: Designing Effective Organizations, 1st ed., Prentice-Hall. Chapters 7-12.

Bueno, E. (2007): Organización de Empresas. Estructura, Procesos y Modelos, 2ª ed., Pirámide, Madrid, Chapters 7, 8 and 9.

Galbraith, J., Downey D. and A. Kates (2002): Designing Dynamic Organizations, American Management Association (AMACOM), New York.

LESSON 8.- Organizational change

8.1. Introduction

8.2. Types of change

8.3. Implementing change

Readings:

Daft, R. L. (2005): Teoría y Diseño Organizacional, 8ª ed., Thomson, México, chapter 11.

Fernández Sánchez, E. (2010): Administración de Empresas, Paraninfo, Madrid, chapter 16.

6. Methodology and working plan

Theoretical sessions. Sessions aimed at introducing and developing the key ideas and concepts of each topic. They involve a presentation by the lecturer who could use audio-visual support, but students are also encouraged to actively participate with their opinions to class discussion. A basic bibliography will be available for students in order to help following and understanding these lectures. Besides, additional material will be available on-line at the university's e-Campus.

Practice-based sessions. They are aimed at developing practical contents related to each topic, as well as to expand the contents presented in the Theoretical sessions. They involve interaction between the teacher and the students. Students are expected to discuss issues and cases, and critically formulate their own arguments. Assignments will be scheduled weekly, and students are expected to prepare them in advance before each session. At the beginning of each session, students could be required to individually write and deliver to the professor the solution to a specific question formulated by him/her at that time.

In addition, during these sessions, students are also encouraged to bring and discuss in the class news from the press or other media related to the topic.

All the material and information of the weekly assignments scheduled for each session will be available on-line at e-Campus.

Depending on the quality of the student's participations in the session discussions and the writing reports delivered to the professor to the questions formulated in the

class, as well as the participation in the theoretical sessions, each student can get up to 1 point out of the four points of the continuous assessment.

During these sessions up to three tests (all with equal weight) could be carried out. The impact of these tests on the four points of the continuous assessment will be up to 2 points.

Group tutorial sessions focused on teamwork. Students will split in small groups (group size will be announced in the first of these sessions). Each group must identify and analyze for the second, third and fourth group tutorial sessions press articles related to a specific topic of the subject. All members of each Group will have to present and discuss with the professor in each group tutorial session. Each student can get up to 1 point for these teamwork activities. Members of each group can be valued differently depending on the quality of their individual contribution to the group, the quality of their presentations and the answers to the questions formulated by the professor in the different group tutorials.

The following table presents the hourly breakdown of these different types of sessions/work.

| | | PRESENTIAL WORK | | | | | | | | NON-PRESENTIAL WORK | | |
|---|--------------------|-----------------------------|--------------------------------|--|---------------------------|--------------------------------|-----------------------------|----------------------------|--------------|---------------------|------------------------|--------------|
| <i>Lessons</i> | <i>Total hours</i> | <i>Theoretical sessions</i> | <i>Practice-based sessions</i> | <i>Computer lab classes / Field practice</i> | <i>Hospital practices</i> | <i>Group tutorial sessions</i> | <i>External internships</i> | <i>Evaluation sessions</i> | <i>Total</i> | <i>Team Work</i> | <i>Autonomous work</i> | <i>Total</i> |
| | | | | | | | | | | | | |
| T1 Organizations and organizational structure | 19,0 | 4 | 3,5 | | | | | | 7,5 | | 11.5 | 11.5 |

| | | | | | | | | | | | | |
|--|------|----|------|--|--|---|--|---|------|----|------|------|
| T2 Design of individual positions | 23,7 | 4 | 5,25 | | | | | | 9,25 | | 14,4 | 14,4 |
| T3 Design of the superstructure | 14,4 | 4 | 1,75 | | | | | | 5,75 | | 8,7 | 8,7 |
| T4 Design of lateral linkages | 19,0 | 4 | 3,5 | | | | | | 7,5 | | 11,5 | 11,5 |
| T5 Descentralización | 4,9 | 2 | 0 | | | | | | 2 | | 2,9 | 2,9 |
| T6 Contingency Factors | 14,4 | 4 | 1,75 | | | | | | 5,75 | | 8,7 | 8,7 |
| T7 Structural configurations | 23,9 | 6 | 3,5 | | | | | | 9,5 | | 14,4 | 14,4 |
| T8 Organizational change | 4,6 | 0 | 1,75 | | | | | | 1,75 | | 2,9 | 2,9 |
| Analysis of the organizational structure of a real firm (teamwork) | 24,0 | | | | | 4 | | | 4 | 20 | | 20 |
| Final exam | 2,0 | | | | | | | 2 | 2 | | | |
| | | | | | | | | | | | | |
| Total | 150 | 28 | 21 | | | 4 | | 2 | 55 | 20 | 75 | 95 |
| | | | | | | | | | | | | |

The following table presents the above information expressed in percentages.

| TYPE | | Hours | % | Total |
|-------------------|---------------------------------------|-------|-------|-------|
| In-class | Lectures | 28 | 18.67 | 36.67 |
| | Practice-based sessions | 21 | 14 | |
| | Computer lab classes / Field practice | 0 | 0 | |
| | Group tutorial sessions | 4 | 2.67 | |
| | External internships | 0 | 0 | |
| | Evaluation sessions | 2 | 1.33 | |
| Out-of-class work | Team work | 20 | 13.33 | 63.33 |
| | Individual work | 75 | 50 | |
| Total | | 150 | | |

An hourly schedule of theory, practice-based and group tutorial sessions is presented in the table below. However, this schedule is intended to be flexible and may be modified in order to adapt to the calendar of each group, as well as to introduce any new activity that may be of interest for the course development, as well as to promote the students commitment and particular interest regarding the different topics covered during the course.

| Week | Type of Activity | Content | Duration |
|------|-----------------------|------------------|----------|
| 1 | Theory | Theory: Lesson 1 | 3 h. |
| 2 | Theory Practice Group | Theory: Lesson 1 | 1.5 h. |

| | | | |
|----|--|--|--------------------------|
| | tutorials | Practice 1 Group formation and instructions | 1.5 h. 1 h. |
| 3 | Theory Practice | Theory: Lesson 2 Practice 2 | 1.5 h. 1.5 h. |
| 4 | Theory Practice | Theory: Lesson 2 Practice 3 | 1.5 h. 1.5 h. |
| 5 | Theory Practice Group tutorials | Theory: Lesson 3 Practice 4 Assignment of topics and fieldwork | 1.5 h. 1.5 h. 1 h. |
| 6 | Theory Practice | Theory: Lesson 3 Practice 5 | 1.5 h. 1.5 h. |
| 7 | Theory Practice | Theory: Lesson 4 Practice 6 | 1.5 h. 1.5 h. |
| 8 | Theory Practice | Theory: Lesson 4 Practice 7 | 1.5 h. 1.5 h. |
| 9 | Theory Practice | Theory: Lesson 5 Practice 8 | 1.5 h. 1.5 h. |
| 10 | Theory Practice Group tutorials | Theory: Lesson 6 Practice 9 | 1.5 h. 1.5 h. 1 h. |

| | | | |
|----|--|--|--------------------------|
| | | Discussion of the first draft of the report | |
| 11 | Theory Practice | Theory: Lesson 6 Practice 10 | 1.5 h. 1.5 h. |
| 12 | Theory Practice | Theory: Lesson 7 Practice 11 | 1.5 h. 1.5 h. |
| 13 | Theory Practice Group tutorials | Theory: Lesson 7 Practice 12 Final report presentation | 1.5 h. 1.5 h. 1 h. |
| 14 | Theory Practice | Theory: Lesson7 Practice13 | 1.5 h. 1.5 h. |

7. Evaluation of the student's learning results

Students will be assessed through the following criteria: a) continuous (controlled) assessment, and b) final exam.

Continuous assessment. Up to four points (40% of the final grade), distributed in the following way:

- Periodical Assessment tests (minimum three), all equally valued, which will be conducted either in practical sessions or through the virtual campus. Up to 2 points.
- Team work presentations in the second, third and fourth group tutorial sessions. Up to 1 point. Members of each group can be valued differently depending on the quality of their individual contribution to the group, the quality of their presentations and the answers to the questions formulated by the professor in the different group tutorials. Only the members of the group attending the presentation will be evaluated. Each group must include a statement in their report regarding the individual contribution of each member for each session.
- Participations in the Practice-based and theoretical sessions, both through student's participations in the session discussions and through the writing reports delivered to the professor answering the questions formulated in the class. Up to 1 point.

The final, written exam. A multiple choice test, weighted 60% on the final grade (up to 6 points).

To pass the course the student will have to achieve in the final exam a minimum of 2 points over the maximum mark of six and achieve a minimum of 5 points, after

having added the marks obtained in the continuous assessment (individual and group assignments) to the mark of the final exam. The grade obtained in the continuous assessment will be considered in all grading periods during the current academic course.

Those students not wishing to participate in the continuous assessment activities (necessarily carried out and evaluated during the semester) may pass the course in any of the grading periods, as long as they get at least 5 points in the final exam over the maximum mark of six –i.e. after applying the 60% weighting to the exam grade.

The table below sums up the weights of the several activities to be evaluated, as well as the minimum requirements for students.

| Evaluation | Weights in final grade (in points) |
|--|--|
| <p>Continuous assessment</p> <p>Periodical Assessment tests</p> <p>Team work coordinated in the Group tutorial sessions</p> <p>Participations in the Practice-based sessions</p> <p>Prerequisites: Yes</p> <p>To add the marks of the Continuous assessment to the final mark, the student will have to achieve in the final exam a minimum of 2 points over the maximum mark of six.</p> <p>Continuous assessment activities require attendance to theory, practice-based and group tutorial sessions (previous individual or team work is expected)</p> | <p>Up to 2</p> <p>Up to 1</p> <p>Up to 1</p> |
| <p>Final exam (in all evaluation periods)</p> <p>Compulsory: Yes</p> | <p>Up to 6</p> |

8. Resources, bibliography and complementary documentation

Basic reference:

Mintzberg, H. (1983): *Structure in Fives: Designing Effective Organizations*, 1st ed., Prentice-Hall.

Additional references:

Arruñada Sánchez, B. (1998): *Teoría Contractual de la Empresa*, 1º Ed. Marcial Pons, Barcelona.

Bueno, E. (2007): *Organización de Empresas. Estructura, Procesos y Modelos*, 2ª ed., Pirámide, Madrid.

Daft, R. L. (2005): *Teoría y Diseño Organizacional*, 8ª ed., Thomson, México.

Fernández Sánchez, E. (2010): *Administración de Empresas*, Paraninfo, Madrid.

Fuente Sabaté, J. M.; García-Tenorio, J.; Guerras, L. A. and J. Hernangómez (1997): *Diseño Organizativo de la Empresa*, Civitas, Madrid.

Galbraith, J., Downey D. and A. Kates (2002): *Designing Dynamic Organizations*, American Management Association (amacom), New York.

Gómez Mejía L. R., Balkin D. B. and R. L. Cardy (2001): *Dirección y Gestión de Recursos Humanos*, 3ª ed. Prentice Hall, Madrid.

Hodge, B. G., Anthony, W. P. y L. M. Gales (2003): *Theoryde la Organización. Un Enfoque Estratégico*, 6ª ed., Pearson, Madrid.

Jones, G. (2001): *Organizational Theory. Text and Cases*, 3ª ed. Prentice Hall.

Kaplan, R. and D. Norton (2001): *Cuadro de mando integral*, Ed. Gestión 2000.

Mintzberg, H. (1983): *La naturaleza del trabajo directivo*, ed. Ariel Economía, Barcelona.

Subject Guide

1. Information about the subject

| | | | | |
|--|---|-------------------------|--|----------------|
| SUBJECT | Dirección Estratégica/Strategic Management | | CODE | GADEMP01-3-008 |
| EDUCATIONAL OFFER | Graduado o Graduada en Administración y Dirección de Empresas Degree in Business Administration and Management | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | Nº TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
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2. Context

Strategic Management is a core subject that belongs to the topic “General Management” within the module “Organization and Management” in the bachelor’s degree in Business Administration. The main goal of the subject is to analyze firms’ strategy in order to explain why some firms are more profitable than others. Therefore, the main contents are related to the following topics: conducting an external and internal analysis of a company's industry environment differentiating among the three levels of strategy (functional, business, corporate), firms’ generic business strategies as source of value creation (cost advantage and differentiation advantage), competitive positioning and firm’s potential for sustaining a competitive advantage, firms’ boundaries and scope (vertical scope, product scope, geographical scope), and firms’ strategic options for growth and internationalization (mergers, acquisitions, and strategic alliances, or cooperative agreements).

3. Requirements

Although specific prerequisites have not been established to follow this subject, it is convenient for students to have passed the course Introduction to Business, which

is a core subject during the first year. Besides, we will build on insights developed in other courses, such as understanding managerial economics, organization, and accountancy. Finally, to fully contribute to class discussion and follow the practical content of the course, students are expected to have basic computer skills to search for additional material for work assignments.

4. Competencies and learning results

General Competences:

- CG5: Skills at searching for and analyzing information in the working environment
- CG7: Ability to work and learn independently
- CG8: Teamwork abilities
- CG11: Decision-making
- CG12: Ability to put knowledge into practice
- CG13: Creativity
- CG14: Initiative and entrepreneurship
- CG16: Ability to organize and plan
- CG19: Concern for quality and good work

Specific Competences

- CE5: To understand the economic and institutional environment and its impact on business decisions
- CE10: To define the strategic planning of the firm.
- CE19: To design and to develop project proposals for new business.

Learning Results

- RA1.2: To identify the internal and environmental factors that drive the competitive strategy of the firm
- RA1.5: To identify the threats and opportunities coming from the national and international environment of the firm
- RA1.6: To evaluate and to select an appropriate strategic planning for each business unit, both at domestic and international level.
- RA1.9: To formulate and to develop project proposals for new business.

5. Contents

Strategic Management covers the most important dimensions within a firm's strategy. The course contents are focused on answering why some firms are more profitable than others. To this end, conceptual frameworks and analytical tools serve to identify the key drivers of superior performance under different conditions, and explain how to formulate strategy contextualized with environmental change and uncertainty.

Abbreviated contents

Lesson 1: Introduction to Strategy

Lesson 2: Industry environment: From environmental analysis to industry analysis

Lesson 3: Internal environment: The role of resources and capabilities

Lesson 4: Competitive advantage

Lesson 5: Corporate strategy: Growth directions and strategies

Extended contents

Lesson 1: Introduction to Strategy

- 1.1. Competing today
- 1.2. Basic framework for strategy analysis: Corporate and business strategy

1.3. Identification of objectives

1.4. Conceptual framework for strategy analysis

Lesson 2: Industry environment: From environmental analysis to industry analysis

2.1 Environmental analysis

2.2 Fundamentals of environmental analysis

2.3 Industry analysis: Five-forces model

2.4 Applying the Five-forces and limitations of the framework

Lesson 3: Internal environment: The role of resources and capabilities

3.1 The firm as a bundle of resources and capabilities

3.2 Classifying resources and capabilities

3.3 From resources to sustainable competitive advantage

3.4 Developing strategy implications

Lesson 4: Competitive advantage

4.1 Competitive advantage defined

4.2 Value creation and competitive advantage

4.3 Cost advantage and differentiation advantage

4.4 Matrix and frontier costs-differentiation

Lesson 5: Corporate strategy: Growth directions and strategies

- 5.1 Introduction to corporate strategy
- 5.2 Growth directions I: Vertical integration
- 5.3 Growth directions II: Diversification and internationalization
- 5.4 Growth strategies

6. Methodology and working plan

Learning methodology includes activities where attendance is mandatory and other activities for self-study.

In-class activities

Lectures: Sessions are aimed at introducing and developing the key ideas and concepts of each topic. They involve a presentation by the lecturer who will use audio-visual support, but students are also encouraged to actively participate with their opinions to class discussion. A basic bibliography will be available for students in order to help following and understanding these lectures. Besides, additional material will be available on-line at the university's e-campus. Therefore, lecture attendance is considered as a requirement in order to correctly follow and pass the course.

Seminars: They are aimed at developing practical contents within each topic. They involve interaction between the lecturer and the students. Students are expected to discuss issues and cases, and critically formulate their own arguments. Assignments will be scheduled weekly, and students are expected to prepare them in advance.

All the material and information of the weekly assignments scheduled for each seminar will be posted on the class website at e-campus.

Group tutorials: They are aimed at solving questions, small group discussion, review of skills, and help with completing teamwork.

During these group tutorials the lecturer will also check the progress of a compulsory teamwork essay that students will have to write along the semester. It consists on the strategic analysis of a firm following the instructions given by the lecturer. The team will be made up of a maximum of 4 students, and on the date proposed they will be required to hand in a written critical analysis of the firm considered.

The lecturer will evaluate all the process of preparing the case analysis, the information gathered, and the written report.

Evaluation sessions: To supervise the learning progress of the student. They will take place during the lectures, seminars, and group tutorials sessions. Likewise, there is a final exam.

Other activities: Conferences or seminars organized by the School of Economics and Business and/or the Business Administration Department, given by firm executives or experts in fields related to Strategic Management. These activities are not compulsory; however it is advisable for students to attend them in order to get a better insight of the contents analyzed in the course.

Out-of-class activities

Individual work: It is basically related to studying the contents that are presented in the lectures, and to preparing in advance the necessary material in order to be able to attend seminars.

Team work: It is related to the student gathering information, analyzing and summarizing contents in order to undertake the compulsory team-work activity.

Materials needed to undertake all the activities correctly will be available on the class website at the university's e-campus —teaching notes, additional materials, readings, questions... The e-campus also offers the possibility to develop discussion forums. Both, email and lecturers' web pages will also facilitate communication between lecturers and students.

The tables below include relevant course information. The first one summarizes an estimation of hours by type of learning activity. The second one shows the breakdown of different activities by week of class. These tables are an approximation and may vary depending on the class progress.

| Activity | Hours | Total hours |
|-------------------|------------|-------------|
| In-class | | |
| · Lectures | 22 | 53 |
| · Seminars | 21 | |
| · Group tutorials | 4 | |
| · Evaluation | 6 | |
| Out-of-class | | |
| · Individual work | 75 | 97 |
| · Teamwork | 22 | |
| TOTAL | 150 | 150 |

| Week | In class activities | Students' work |
|----------|--|------------------------|
| 1 | Presentation of the theoretical and practical contents of the course Lesson 1 | Revision of the course |

| | | |
|----------|--|---|
| | | guide Study lesson 1 |
| 2 | Lesson 1 | Study lesson 1 Prepare seminar for lesson 1 |
| 3 | Lesson 2 | Study lesson 2 |
| 4 | Lesson 2 | Study lesson 2 Prepare seminars for lesson 2 |
| 5 | Lesson 2 | Study lesson 2 Prepare seminars for lesson 2 |
| 6 | Lesson 3 | Study lesson 3 Prepare seminar for lesson 3 |
| 7 | Lesson 3 | Study lesson 3 Prepare seminar for lesson 3 |
| 8 | Lesson 4 Controlled assessment test (units 1, 2 and 3) | Study lesson 4 Prepare seminar for lesson 4 |
| 9 | Lesson 4 | Study lesson 4 Prepare seminar for lesson |

| | | |
|---------------------|--|--|
| | | 4 |
| 10 | Lesson 4 | Study lesson 4 Prepare seminar for lesson 4 |
| 11 | Lesson 5 | Study lesson 5 Prepare seminar for lesson 5 |
| 12 | Lesson 5 Hand- in teamwork activity | Study lesson 5 Prepare seminars for lesson 5 |
| 13 | Lesson 5 General overview | Prepare seminars for lesson 5 Course general overview |
| Exams period | | Prepare final exam |

7. Evaluation of the student's learning results

The evaluation process will be based on:

1. *Controlled assessment.* Students can obtain a maximum of 4 points as a result of doing the following compulsory activities:

- Students will have to individually undertake 1 written learning assignment related to course contents to be done during any lecture in the semester. This assignment will be scheduled in advance and it will have a maximum weight of 2 points in the final grade
- Each week, class participation, written assignments, and discussion will be evaluated. Students can obtain a maximum of 1 point as a result of these assignments. Late assignments will not be considered and will result in forfeiting that portion of the grade.
- Students will be required to do a team-work activity consisting on the strategic analysis of a firm following the instructions given by the lecturer. The team will be made up of a maximum of 4 students, and deliverable is a written critical analysis of the firm case being analyzed to be hand in on the date due (one week before the lectures are over).

It is important to keep up with the weekly steps specified by the lecturer that will be controlled during the tutorials, as completing each step successfully constitutes 2,5% of the final grade. The format and other parameters of the analysis will be explained in class.

The lecturer will evaluate all the process of preparing the case analysis, the information gathered, and the written report. Plagiarism will not be tolerated as stated in the norms of evaluation of this University.

2. *Final exam.* Once the semester is over, students will have to undertake a final exam with essay questions of both theoretical and practical nature. A maximum of 6 points can be obtained in this exam. The exam will not only evaluate students' knowledge of the subject, but also the use of an appropriate technical language and correct style.

To pass the course students must obtain a minimum of 5 points as result of adding both, the controlled assessment (due to both the compulsory and non-compulsory activities) and the final exam. However, a minimum of 2 points is required (in the 6 point) final exam to add the controlled assessment results to this grade and pass the course. Both, the assessment process and the weights of the different activities on the final grade will be maintained also for the extraordinary evaluations (May and July).

Students choosing not to participate in the controlled assessment process can pass the course if they obtain a minimum of 5 points in the 6 points final exam. The following table shows the assessment process that will be followed in this subject.

Summary Table

| Assessment | Weight in final grade (points) |
|---|--------------------------------|
| Controlled assessment | |
| <i>Compulsory assignments</i> | |
| Discussion/Hand in/Exposition in class of the practical assignments | |
| 1 written learning assignments related to lectures | 1 (maximum) |
| Written firm case teamwork activity | 2 (maximum) |
| | 1 (maximum) |
| Minimum requirements: Yes No | |
| Controlled evaluation assignments will take place in lectures, seminars and group tutorials, which means that ATTENDANCE is compulsory. | |

| | |
|--|--------------------|
| <p>Final exam</p> <p>Maximum grade: 6</p> <p>Compulsory: Yes No</p> <p>Note that, despite of the grade achieved as a result of the controlled assessment, a minimum of 2 points is required in the final exam to pass the course.</p> | <p>6 (maximum)</p> |
|--|--------------------|

8. Resources, bibliography and complementary documentation

Basic bibliography:

Besanko, D., Dranove, D., Shanley, M., Shaefer, S. (2010): *Economics of Strategy*, Wiley and Sons.

Grant, R., Jordan, J. (2015): *Foundations of Strategy*, 2nd edition, Wiley and Sons.

Spanish handbook:

Ventura Victoria, J., (2008): *Análisis Estratégico de la Empresa*, Paraninfo Cengage Learning, Madrid.

Additional bibliography:

Grant, R. (2013): *Contemporary Strategy Analysis*, 8th edition, Wiley and Sons.

Jones, G., Hill., C. (2010): *Theory of Strategic Management*, 9th edition, South-Western, Cengage Learning. Rumelt, R. (2011): *Good Strategy Bad Strategy: The Difference And Why It Matters*. Crown Business.

Subject Guide

1. Information about the subject

| | | | | |
|--------------------------------------|---|-------------------------|--|----------------|
| SUBJECT | Análisis de los Estados Financieros/Analysis of Financial Statements | | CODE | GADEMP01-3-009 |
| EDUCATIONAL OFFER | Graduado o Graduada en Administración y Dirección de Empresas Degree in Business Administration and Management | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | Nº TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
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2. Context

According to the Bachelor's Degree in Management and Business Administration Curriculum, *Analysis of Financial Statements* is included in the module of Accounting, specifically under the heading Financial Accounting.

In management and business administration studies, accounting is a fundamental subject, because it provides highly useful information that enables users to assess the financial health of a company and to make informed decisions. Though managers are likely to be important users of accounting information relating to their particular business, they are by no means the only users. There is a wide range of users outside the business who may also need accounting information.

Analysis of Financial Statements is taken in the third year of the Bachelor's Degree in Management and Business Administration (ADE), once the students have acquired some knowledge about financial accounting (in the *Introduction to Accounting* course, first year) and management accounting (in the *Cost Accounting and Management Control* course, second year).

As users of financial information, students should be able to correctly interpret financial statements to evaluate the financial position of the company that has produced them, and by doing so, make appropriate decisions. In this sense, it is important to highlight the undoubtedly practical application of this subject because knowledge of financial information analysis is essential to many ADE graduate professions such as risk analysts, investment analysts, auditors, financial managers, etc. Since Accounting is the language of business, in any professional position that involves dealing with accounting information, it is necessary to have a good understanding of its analysis techniques.

3. Requirements

Although no mandatory prerequisites have been established to take this course, it is highly advisable that students review the content of the first-year course *Introduction to Accounting*.

4. Competencies and learning results

The generic competencies which students will develop in *Analysis of Financial Statements* include:

- Ability for abstract and analytical thinking, and synthesis of ideas.
- Capacity to learn and stay up-to-date with learning.
- Ability to communicate both orally and in writing in English.
- Ability to search for, process and analyse information from a variety of sources.
- Ability to use information and communications technologies (ICT).
- Ability to work autonomously.
- Ability to work in a team.
- Ability to work in an international context.
- Ability to be critical and self-critical.
- Ability to make reasoned decisions.
- Ability to apply knowledge in practical situations.
- Capacity to generate new ideas (creativity).
- Organization and planning capability.
- Adaptability to changing environments.
- Ability to evaluate and maintain the quality of work produced.
- Ability to act on the basis of ethical reasoning.

The specific competencies which students will develop upon completion of the course are to:

- Identify and apply appropriate quantitative tools to the analysis of economic information.
- Use and interpret specific data-processing software.

- Prepare and analyse internal and external accounting information for management control and decision making.
- Transmit information, ideas, problems and solutions in the field of business management both to a specialist and non-specialist audience.
- Issue advisory reports on specific companies and market situations.

As far as student learning outcomes are concerned, the knowledge and skills that students will achieve upon successful completion of the course will enable them to:

- Understand the accounting principles and procedures underlying the company's financial statements at a basic level and apply them in the bookkeeping process and transaction analysis.
- Understand the accounting cycle, determining accounting profit and producing financial statements.
- Promote ethical behaviour in accounting and ensure standards of professional conduct.
- Analyse and interpret company Annual Accounts.
- Apply techniques and tools of financial analysis in order to measure business performance.
- Interpret business financial statements to evaluate the financial position of real companies, the success of their operations, and gain an insight into their future performance.
- Evaluate business management.
- Identify the different problems that a company faces.
- Identify, record and report relevant economic and financial data to allow informed business decision making.

5. Contents

The following table shows the abbreviated programme of the course *Analysis of Financial Statements*:

Abbreviated Programme

| |
|--|
| Unit 1: Introduction to Financial Statement Analysis Using a Case Study. |
| Unit 2: The Annual Accounts. |
| Unit 3: The Balance Sheet. |
| Unit 4: The Income Statement. |
| Unit 5: The Statement of Cash Flows. |
| Unit 6. Liquidity and Solvency Analysis. |
| Unit 7. Profitability Analysis. |

The detailed programme of the course, along with the specific objectives of each unit are listed below:

Detailed Programme and Unit Learning Objectives

Unit 1. Introduction to Financial Statement Analysis Using a Case Study.

- 1.1. Introduction.
- 1.2. Case study description.
- 1.3. The relationship between the main financial statements.
- 1.4. Calculation and interpretation of commonly used indicators of profitability and solvency.
- 1.5. Formulation of an overall assessment of the financial position and performance of the company.

Overall objective of the unit:

This unit introduces the subject using a simple case study in which the Annual Accounts of a company are presented and analysed.

Specific learning objectives:

- Identify the objectives of financial statements analysis.
- Introduce the Annual Accounts.
- Highlight the major relationships between the main financial statements.
- Point out some indicators of profitability and solvency.
- Outline the main features of an assessment of the financial position and performance of the company.

Unit 2. The Annual Accounts.

- 2.1. Standards for the preparation of Annual Accounts.
- 2.2. The Annual Accounts in accordance with the Spanish General Accounting Plan (PGC).
 - 2.2.1. The Balance Sheet.

2.2.2. The Income Statement.

2.2.3. The Statement of Cash Flows.

2.2.4. The Statement of Changes in Equity

2.2.5. Notes to the Annual Accounts.

2.3. The Consolidated Annual Accounts.

2.4. Databases with accounting information for analysis.

Overall objective of the unit:

This unit explains general features of the Annual Accounts in accordance with the Spanish General Accounting Plan (PGC), introducing their format and content.

Specific learning objectives:

- Outline the formats set out by the Spanish General Accounting Plan for the Annual Accounts.
- Introduce the Consolidated Annual Accounts.
- Describe the structure and content of the documents included in a complete set of Annual Accounts and the information they provide.
- Identify some databases with accounting information for analysis.

Unit 3. The Balance Sheet.

3.1. The Balance Sheet in accordance with the Spanish General Accounting Plan (PGC).

3.2. Assets.

3.3. Equity.

3.4. Liabilities.

3.5. Uses and limitations of the Balance Sheet for analysis purposes.

Overall objective of the unit:

This unit focuses on the format and preparation standards of the Balance Sheet in accordance with the Spanish General Accounting Plan (PGC) and the information it provides.

Specific learning objectives:

- Describe the format of the Balance Sheet prescribed by the Spanish General Accounting Plan (PGC).
- Identify and interpret the main items that make up assets.
- Identify and interpret the main items that make up equity.
- Identify and interpret the main items that make up liabilities.
- Discuss the uses and limitations of the Balance Sheet for decision-making purposes.

Unit 4. The Income Statement.

4.1. The Income Statement in accordance with the Spanish General Accounting Plan (PGC).

4.2. Results from operating activities.

4.3. Net finance income / (expense).

4.4. Profit / (loss) for the period.

4.5. Uses and limitations of the Income Statement for analysis purposes.

Overall objective of the unit:

This unit focuses on the format and preparation standards of the Income Statement in accordance with the Spanish General Accounting Plan (PGC) and the information it provides.

Specific learning objectives:

- Describe the format of the Income Statement prescribed by the Spanish General Accounting Plan (PGC).
- Identify and interpret the items of income and expenses included in the calculation of the results from operating activities.

- Identify and interpret the items of income and expenses included in the calculation of net finance income or expense.
- Identify and interpret the profit or loss for the period.
- Discuss the uses and limitations of the Income Statement for decision-making purposes.

Unit 5. The Statement of Cash Flows.

5.1. Cash flow as cash movements.

5.2. The Statement of Cash Flows in accordance with the Spanish General Accounting Plan (PGC). Preparation and interpretation.

5.3. Uses of the information about cash flows for analysis purposes.

5.4. An alternative definition of cash flow.

Overall objective of the unit:

This unit focuses on the format and preparation standards of the Statement of Cash Flows in accordance with the Spanish General Accounting Plan (PGC) and the information it provides.

Specific learning objectives:

- Identify and calculate the cash inflows and outflows of an entity during the reporting period.
- Apply the direct and indirect methods to present the Statement of Cash Flows.
- Prepare the Statement of Cash Flows in accordance with International Accounting Standard 7 (IAS 7) and the Spanish General Accounting Plan (PGC).
- Calculate and interpret cash flows from operating activities.
- Interpret and assess the financial position of a company using the information provided by the Statement of Cash Flows.
- Calculate and interpret an alternative definition of cash flow.

Unit 6. Liquidity and Solvency Analysis.

6.1. Tools and techniques for analysis: percentages, ratios and differences.

6.2. Analysis of the equilibrium of financial structure.

6.3. Normal operating cycle analysis.

6.4. Working capital analysis.

6.5. Techniques and ratios for financial analysis.

6.5.1. Short-term financial analysis.

6.5.2. Long-term financial analysis.

Overall objective of the unit:

The main purpose of this unit is to explain various indicators and techniques to analyse the liquidity and solvency of a company.

Specific learning objectives:

- Identify, evaluate and interpret the different financial positions a company can face.
- Calculate and interpret the normal operating cycle of a company.
- Calculate and analyse the required level of investment in working capital and compare it with the existing investment.
- Calculate and interpret commonly used ratios to assess the position and performance of a business both in the short-term and in the long-term.

Unit 7. Profitability Analysis.

7.1. Analysis of the Income Statement.

7.2. Profitability ratios.

7.3. Financial leverage (gearing).

7.4. Value Added: the Value Added Statement.

7.5. Other indicators for analysis.

Overall objective of the unit:

The main purpose of this unit is to explain various indicators and techniques to analyse a company's ability to generate wealth for their owners and other stakeholders.

Specific learning objectives:

- Interpret the main headings and subtotals of the Income Statement.
- Calculate and interpret profitability ratios.
- Calculate and interpret financial leverage.
- Calculate and interpret the value added and its distribution.
- Calculate and interpret other indicators used for analysis.

6. Methodology and working plan

The teaching-learning methodology used in the *Analysis of Financial Statements* course is based on a combination of in-class and out-of-class activities, in both cases encouraging active student participation by means of the introduction of elements of discussion and argument during the classes, with a view to assessing and supervising students' understanding of the topics explained.

In this discipline theory and practice are perfectly integrated, so any teaching method for accounting must necessarily have a strong practical orientation which helps the student face and confront economic reality by applying theoretical knowledge. Accordingly, in-class practical activities involve participative discussions and resolution of exercises wherein students take an active role, consolidating previously acquired knowledge and identifying gaps and doubts that may arise upon its implementation.

The students who follow the course in Spanish will use the following basic bibliography (Servicio de Publicaciones de la Universidad de Oviedo):

- Manual de Análisis de los Estados Financieros.
- Supuestos de Análisis de los Estados Financieros.

Additional resources to be used in the development of the course will be available to students through the Virtual Campus (Course Moodle), and they should be supplemented with the instructor's explanations during in-class activities.

The proposed methodology of the course includes the following activities, described below:

In-class activities: 53 hours

- Lectures. Lectures are aimed at presenting the key concepts and theoretical aspects of the subject, which are illustrated with numerous examples. The course will foster active participation and student engagement.
- Practical sessions. These activities involve discussing and solving cases and exercises which will help students consolidate their understanding of the subject and develop their capability for analysis by applying previously acquired theoretical knowledge. Active-learning techniques will be used in order to encourage student participation and interpersonal interaction among students, as well as between the instructor and students.
- Group tutorials. Instructional activity conducted by a faculty member in order to review and discuss the materials and topics presented in class, both individually and in groups.
- Evaluation session. Written exam consisting of theoretical questions and practical exercises to assess student progress.

Out-of-class activities: 97 hours.

Student's individual work. It consists of the following activities: reading lecture notes in advance and solving the cases and exercises at home before in-class practical sessions; subsequently studying what has been discussed in class; completing homework assignments and carrying out, where appropriate, any other out-of-class activities; and preparing for the final exam.

The following table summarises the distribution of time for each type of activity:

| Activity | | Hours | Total Hours (%) |
|-------------------------|--------------------|-------|-----------------|
| In-Class Activities | Lectures | 28 | 53 (35.33%) |
| | Practical sessions | 21 | |
| | Group tutorials | 4 | |
| Out-Of-Class Activities | Individual work | 97 | 97 (64.67%) |
| Total | | 150 | 150 (100%) |

7. Evaluation of the student's learning results

The following methods will be used to evaluate student performance:

1. **Continuous assessment.** It involves the analysis of the various stages the student will go through during the learning process so as to assess student progress and then produce evaluation results from these periodic assessments. This method of assessment will be based on objective follow-up tests and activities throughout the course. The purpose of the continuous assessment is to evaluate the level of knowledge and learning outcomes achieved by students at each point in time. Since the content of this course is cumulative, students must demonstrate during the course that they understand and assimilate the subject by accomplishing certain goals and learning outcomes when these are required. Therefore, there will not be retakes for continuous assessment tests and activities.
2. **Final exam.** It is the overall assessment that takes place at the end of the learning process, which quantifies and evaluates student performance with a grade. Its primary purpose will be to measure the level of student achievement at the end of the course.

Grading system

The final grade in the ordinary examination of the academic year 2015-2016 will be a weighted average of scores on the continuous assessment and the final exam, with a weighting of 40% for the continuous assessment and 60% for the final exam. In the extraordinary examinations of the academic year 2015-2016, students will be assessed through a single final exam which accounts for a maximum of 10 points (40% of which corresponds to the make-up of the continuous assessment). The grades obtained on the continuous assessment during the development of the course will not be maintained in the extraordinary examinations. Continuous assessment shall be carried out within the official group to which the student has been officially assigned for all kind of in-class activities (lectures, practical sessions and group tutorials). Successful completion of the course is achieved when the student attains a final passing grade of 5 points or above (out of 10).

Grading System Summary

| Evaluations | Grading System | Final Grades (Points) |
|--|--|--|
| Ordinary examination academic year 2015- 2016 | Continuous assessment + Final exam | Continuous assessment: maximum 4 points + Final exam: maximum 6 points |
| Extraordinary examinations academic year 2015-2016 | Final exam | Final exam: maximum 10 points (40% of which corresponds to the make-up of the continuous assessment) |

Alternative Assessment for Part-Time Students

Students certified as registered part-time students, according to article 7 of the “Rules for the evaluation of learning results and the abilities acquired by students”, will be assessed through a single final exam, which will take place on the same date for all the students of the course. This final exam accounts for a maximum of 10 points. Successful completion of the course is achieved when the student attains a final passing grade of 5 points or above (out of 10).

8. Resources, bibliography and complementary documentation

Bibliography in English

ATRILL, PETER; AND MCLANEY, EDDIE (2013a): *Accounting and finance for non-specialists*, Eighth Edition, Prentice Hall (Pearson Education), England.

ATRILL, PETER; AND MCLANEY, EDDIE (2013b): *Financial accounting for decision makers*, Seventh Edition, Prentice Hall (Pearson Education), England.

ELLIOTT, BARRY; AND ELLIOTT, JAMIE (2012): *Financial accounting and reporting*, Fifteenth Edition, Prentice Hall (Pearson Education), England.

FRASER, LYN M.; AND ORMISTON, AILEEN (2013): *Understanding financial statements*, Tenth Edition, Pearson Education, England.

SCHOENEBECK, KAREN P.; AND HOLTZMAN, MARK P. (2013): *Interpreting and analyzing financial statements. A project-based approach*, Sixth Edition, Prentice Hall (Pearson Education), New Jersey.

SUBRAMANYAM, K.R.; AND WILD, JOHN J. (2009): *Financial statement analysis*, Tenth Edition, McGraw-Hill International Edition.

TRACY, JOHN A. (2009): *How to read a financial report. For managers, entrepreneurs, lenders, lawyers, and investors. Wringing vital signs out of the numbers*, Seventh Edition, John Wiley and Sons, New Jersey.

WALSH, CIARAN (2008): *Key management ratios. The 100+ ratios every manager needs to know*, Fourth Edition, Prentice Hall (Pearson Education), England.

Bibliography in Spanish

Basic Bibliography

ÁLVAREZ PÉREZ, B.; DE ANDRÉS SUÁREZ, J.; CÁRCABA GARCÍA, A.; CASTRO PÉREZ, O.; FERNÁNDEZ RODRÍGUEZ, E. GARCÍA CORNEJO, B.; GARCÍA DIEZ, J.; GARCÍA FERNÁNDEZ, R.; LORCA FERNÁNDEZ, P.; PÉREZ MÉNDEZ, J.A.; SUÁREZ ÁLVAREZ, E. (2014): *Manual de Análisis de los Estados Financieros*, Servicio de Publicaciones de la Universidad de Oviedo, Oviedo.

ÁLVAREZ PÉREZ, B.; DE ANDRÉS SUÁREZ, J.; CÁRCABA GARCÍA, A.; CASTRO PÉREZ, O.; FERNÁNDEZ RODRÍGUEZ, E. GARCÍA CORNEJO, B.; GARCÍA DIEZ, J.; GARCÍA FERNÁNDEZ, R.; LORCA FERNÁNDEZ, P.; PÉREZ MÉNDEZ, J.A.; SUÁREZ ÁLVAREZ, E. (2014): *Supuestos de Análisis de los Estados Financieros*, Servicio de Publicaciones de la Universidad de Oviedo, Oviedo.

Supplementary Bibliography

AMAT i SALAS, O. (2008): *Análisis integral de empresas. Claves para un chequeo completo: desde el análisis cualitativo al análisis de balances*, Bresca Editorial,

S.L., Barcelona.

ARCHEL DOMENCH, P.; LIZARRAGA DALLO, F.; SÁNCHEZ ALEGRÍA, S. y CANO RODRÍGUEZ, M. (2012): *Estados contables. Elaboración, análisis e interpretación*, Pirámide, Madrid.

DE JAIME ESLAVA, J. (2008): *Las claves del análisis económico-financiero de la empresa*, ESIC Editorial, Madrid.

GONZÁLEZ PASCUAL, J. (2011): *Análisis de la empresa a través de su información económico-financiera. Fundamentos teóricos y aplicaciones*, Pirámide, Madrid.

GONZÁLEZ PASCUAL, J. (2011): *Análisis de la empresa a través de su información económico-financiera. Aplicaciones prácticas*, Pirámide, Madrid.

GUTIÉRREZ VIGUERA, M. (2011): *Análisis contable para directivos*, CISS, Valencia.

PÉREZ-CARBALLO VEIGA, J.F. (2010): *Diagnóstico económico-financiero de la empresa*, ESIC Editorial, Madrid.

RIVERO TORRE, P. (2009): *Análisis de balances y estados complementarios*, Pirámide, Madrid.

RIVERO TORRE, P. (2012): *Análisis de balances y estados complementarios. Ejercicios resueltos y comentados*, Pirámide, Madrid.

ROJO RAMÍREZ, A. (2011): *Análisis económico-financiero de la empresa. Un análisis desde los datos contables*, Garceta, Madrid.

Rules and Regulations in English

Spanish General Accounting Plan (Plan General de Contabilidad Español. English Translation), Instituto de Contabilidad y Auditoría de Cuentas, Madrid, <http://www.icac.meh.es>.

Rules and Regulations in Spanish

Real Decreto 1514/2007, de 16 de noviembre, por el que se aprueba el Plan General de Contabilidad (BOE de 20 de noviembre).

Real Decreto 1515/2007, de 16 de noviembre, por el que se aprueba el Plan General de Contabilidad de Pequeñas y Medianas Empresas y los criterios contables específicos para microempresas (BOE de 21 de noviembre).

Websites

| Organization | Website |
|--|---|
| Asociación Española de Contabilidad y Administración de Empresas (AECA) | http://www.aeca.es |
| Banco de España | http://www.bde.es |
| Base de Datos SABI | http://buo.uniovi.es |
| Comisión Nacional del Mercado de Valores (CNMV) | http://www.cnmv.es |
| Instituto de Contabilidad y Auditoría de Cuentas (ICAC) | http://www.icac.meh.es |
| International Accounting Standards Board (IASB) | http://www.iasb.org |
| Registros Mercantiles | http://www.registradores.org |

Subject Guide

1. Information about the subject

| | | | | |
|-----------------------------------|---|-------------------------|--|----------------------------------|
| SUBJECT | Ciencia Política/Political Science | | CODE | GADEMP01-4-004 GECONO01-4-003 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Economics | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Optativa/Elective | N° TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| LECTURERS | | EMAIL | | |
| NOVO VAZQUEZ MARIA AMPARO | | anovo@uniovi.es | | |
| SANCHEZ BRAVO-VILLASANTE FERNANDO | | fsanchez@uniovi.es | | |

2. Context

POLITICAL SCIENCE is an elective subject for the Bachelor's Degrees in Economics, and Management and Business Administration offered by the School of Economics and Business. It belongs to the module on *Historical and Social Analysis*.

The subject has an introductory character and provides basic knowledge on the concepts, theories and methodologies which are central to the political science perspective. The students will acquire an integrative view of the fundamental dynamics and dimensions of contemporary political systems, with a particular attention to Spanish and European societies.

3. Requirements

POLITICAL SCIENCE does not demand specific skills or competencies apart from those relating to access to the Grade.

4. Competencies and learning results

The subject is aimed at the development of the competencies which enhance the capabilities for analysis and synthesis, for critical and self-critical reasoning and

learning and for fluent oral and written communication. The knowledge of the political science perspective will contribute to a better understanding and recognition of the democratic principles of equal treatment and opportunities in the development of contemporary societies.

More specifically, POLITICAL SCIENCE will provide a framework of knowledge and competencies which will facilitate the understanding of the political environment in which economical behaviour, actors and institutions are embedded.

As a result of the learning process, the student should acquire a set of concepts, theories and methodologies. Also, the student should be able to put into practice this knowledge to understand the political dimensions and dynamics of contemporary societies. Furthermore, the student should learn the basic characteristics which define Political Science as a scientific discipline and its field. Additionally, the student should be able to understand and interpret the political reality from a scientific perspective.

5. Contents

The course programme of the subject is organized in 9 lessons:

1. Politics and approaches in Political Science
2. The Nation-state
3. Democracies and authoritarian regimes
4. Legislatures and elections
5. Governments and bureaucracies
6. Constitutions and judicial power
7. Political parties
8. Policy-making
9. Globalization and the EU: beyond the nation-state

6. Methodology and working plan

The methodology of the subject corresponds to the criteria of curricula and teaching practice which are established in the European Higher Education Area. It combines work requiring attendance of the students, including lectures (with a theoretical focus), seminars (with a practical content) as well as other presential

activities, namely group tutorials.

The work plan foresees activities either requiring attendance or not requiring it.

On the one hand, presential learning activities will have a total duration of 56 hours, according to the following distribution:

- 1) Lectures, with a theoretical focus (1.5 hours). These sessions will be held on a regular basis of one session per week. In the lectures, the professor will provide the basic theoretical concepts and the terminology of political science analysis. Also, the students will receive some fundamental notions for the understanding of the macro-processes and structures of political systems, with the aim of fostering their capacity of critical reflection.
- 2) Seminars, with a practical content (1.5 hours). These sessions will be also held on a regular basis of one session per week. They will require the active participation of the students in the exercises provided by the professor, aimed at complementing and reinforcing the theoretical contents of each unit. The seminars will require the utilization of different instruments of text analysis and techniques of qualitative and quantitative analysis of political phenomena which will be the basis for the interpretative debate.
- 3) Group Tutorials (1 hour). Additionally, sessions of Group Tutorials will be held, which will require the participation of the students, with individual presentations.

On the other hand, non presential learning activities will have a total duration of 95 hours. This means that the academic activity which does not require students' attendance constitutes 63.33% of the estimated total workload of the subject. Non presential learning activity includes individual work to be carried out by the student in order to prepare and revise the practical exercises provided in the Seminars, the preparation of working essays, the study and reading for the evaluation sessions and the use of the different bibliographic, audiovisual and electronic resources which are connected to the subject. Also, the preparation of the Seminars requires additional time for pre-reading and revising the materials of the practical exercises, namely texts, graphics and other data sets and information.

7. Evaluation of the student's learning results

Evaluation of the subject will rely on different instruments. Those students following a continual evaluation procedure will be evaluated as follows:

- 1) Through a final written examination (60%)
- 2) Through participation in practical seminars and homework (40%)

Extraordinary examination sessions will maintain the same principles of evaluation of ordinary examination sessions.

The specific aspects on the procedure of evaluation of the subject are:

- 1) The final written Examination accounts up to a 60 per cent of the final mark, and will evaluate the student's command of the theoretical aspects of the course

programme, as well as the individual capacity to apply the practical contents of the subject as presented in Seminar sessions. It will take into account the students' critical abilities, including the appropriate use of the terminology of the subject, and the order and consistency in the presentation of the written discourse. It is necessary to obtain half of the mark assigned to this exam (30%) as a minimum, for the mark obtained through continual evaluation to be taken into account.

2) Practical sessions and exercises require sustained and active participation of students and will represent 40% of the final grades. Students failing to attend more than three practical sessions will lose their right to continual evaluation.

An essay on one topic related to the course programme will be valued with 20% of final grades, and will be presented to the class, and debated during the Group Tutorials.

The remaining 20% of final grades can be obtained by active participation in sessions and through the delivery of responses to practical exercises proposed by the course professor.

8. Resources, bibliography and complementary documentation

The students of the subject will have to use and consult on a regular basis a number of basic references in order to complement the theoretical and practical materials provided during the course. The orientation and contents of these references are coherent with the course programme of the subject. The basic reference for the course programme is:

Caramani, Daniele (2011) **Comparative Politics**, Oxford University Press.

This textbook, written by international experts, provides an authoritative and updated introduction to political science, and covers the key subject areas of comparative politics, including advanced industrial nations and developing regions. The Online Resource Centre that accompanies the book includes a wealth of research, learning and teaching materials:

- Comparative data sets for over 200 countries
- Web directory of data archives
- Country profiles
- Review questions and exercises
- Glossary

It is accessible at: www.oxfordtextbooks.co.uk/orc/caramani/

Additionally, the professor can propose additional complementary references to be consulted in relation to a particular unit of the course programme.

Finally, the subject requires knowledge of the most common computer instruments of quantitative and qualitative analysis and graphic representation, for the

realization of classroom practices and course essays. Skills of written and oral presentation and of working with Word, PowerPoint, Excel (or similar software programmes) are expected.

Subject Guide

1. Information about the subject

| | | | | |
|------------------------------------|--|-------------------------|---|----------------------------------|
| SUBJECT | Sociología del Trabajo y de las Relaciones Laborales /Sociology of Work and Labour Relations | | CODE | GADEMP01-4-005 GECONO01-4-020 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Economics | CENTER | Facultad de Economía y Empresa School of Economics and Business Administration | |
| TYPE | Optativa/Elective | N° TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| LECTURERS | | EMAIL | | |
| GONZALEZ MENENDEZ MARIA DEL CARMEN | | m.gonzalez@uniovi.es | | |
| GUTIERREZ PALACIOS RODOLFO | | rgutier@uniovi.es | | |

2. Context

The module Sociology of Work and Labour Relations is part of the Historical and Social Analysis modules' block (Discipline: Sociology) .

The module aims to provide a theoretical and applied knowledge of the sociological perspective on work, labour markets, organizational and occupational dimensions of work and actors and institutions of labour relations. It focuses mainly in studying the Spanish context with a comparative European and global approach.

The module complements others available both in the Business Administration (BA) Degree (Human resource Management, Organizational Design and Strategic Management) and in the Economics Degree (Industrial Economy, Labour Economics and Labour Law). As a whole, these modules provide the student with an initial specialization well valued to start a professional career in the field of human resource management.

3. Requirements

No specific requirements, apart from the general ones to the 4th year in the Economics and Business Administration Degrees.

4. Competencies and learning results

The course is aimed at the development of **generic competencies** such as: capabilities for analysis and synthesis, critical and self-critical reasoning and learning, and fluent verbal and written communication skills. The knowledge of the sociological perspective will contribute to a better understanding and recognition of the democratic principles of equal treatment and opportunities in the development of contemporary societies, labour markets and organizations.

The course also contributes to achieve and reinforce the following **specific competencies** of the Degrees in Economics and BA:

- To know and evaluate the variants of institutional and political contexts of labour markets, and their potential impact on firm strategies and decisions (CE5 BA; CE6 Economics).
- To understand ten complex and changing interactions of economic and social actors in the fields of work and employment (CE9 BA, CE11 Economics).
- To be able to transmit to specialists and non specialist ideas, new problems and answers in the spheres of human resources and labour relations management (CE20 BA; CE17 Economics).

The knowledge and use of the the sociological perspective will provide the students with the following **learning outcomes**:

- To understand and distinguish the variety of and trends in job organization, and in individual and collective job behaviour (RA1).
- To be able to connect changing patterns of employment and labour relations with macroeconomic tendencies and policies (RA3).
- To apply the sociological perspective to propose ideas to improve performance of firms and organizations in the field of employment and labour relations. (RA8).

5. Contents

The course programme is divided into eight units:

1. Sociological perspectives on work, labour markets and relations: theoretical paradigms.
2. Macro-trends of change at work: technological change and globalization.
3. Comparative labour relations systems.
4. Work organization, job control and job quality.
5. Occupations and occupational structure: polarisation and dualisation.
6. Work cultures and identities. Work satisfaction.
7. Conflict, collective bargaining and social concertation.
8. Motivation and rewarding.

6. Methodology and working plan

Teaching plan combines four types of activities:

- a) Weekly lectures (1.5 hours) with a theoretical focus.
- b) Weekly classroom practical sessions (1.5 hours), mainly devoted to presentations and discussion of selected reading materials, and to other practical activities aimed at proving knowledge and critical use of theoretical information.
- c) Four group tutorial sessions (1 hour each), in which the students are asked to present and discuss the design, development and results of a short course

essay.

d) Final exam (2 hours).

| Activities | | Hours | % | Total |
|-------------------------------|------------------------------|-------|------|-------|
| Work requiring attendance | Lectures | 22,5 | 15 | 55 |
| | Classroom practical sessions | 22,5 | 15 | |
| | Group tutorial | 4 | 2,7 | |
| | Evaluation session | 6 | 3,3 | |
| Work not requiring attendance | Individual work | 95 | 63,3 | 95 |
| | Total | 150 | | |

7. Evaluation of the student's learning results

Assessment will rely on a combination of different instruments:

1) Through a final written exam (60% of the final mark)

2) Continuous evaluation, through:

- Active participation in the classroom practical sessions (20% of the final mark)
- Written course essay and participation in group tutorials (20% of the final mark)

Students failing to attend three or more course sessions (lectures, practical of tutorial) will lose their right to continuous evaluation. To pass continuous evaluation students are required to get a minimum of 2 points out of 4; to pass final exam 3 points out of 6 are required.

Marks of continuous evaluation can be kept for a second (extra-ordinary) final exam call.

8. Resources, bibliography and complementary documentation

Basic bibliography

GonzálezMenéndez, M., Gutiérrez Palacios, R. y Martínez Lucio M. (2011) (coord.) *Gestión de Recursos Humanos. Contexto y Políticas*. Pamplona: Thomson-Cívitas.

Köhler, H-D. y Martín Artiles, A. (2005) *Manual de Sociología del Trabajo y de las Relaciones Laborales*. Madrid: Delta Publicaciones.

Vallas, S.P., Finlay, W. and Wharton, A.S. (2009), *The Sociology of Work: Structures and Inequalities*. Oxford, Oxford University Press.

Watson, T. (2012), *Sociology, Work and Organization*. London, Routledge.

Statistical sources:

EuropeanData Centerfor Work and Welfare (EDACWOWE): <http://www.edac.eu/>

Eurostat: <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>

Eurofound (Fundación Europea para la mejora de las Condiciones de Vida y de Trabajo): <http://www.eurofound.europa.eu/>

Instituto Nacional de Estadística/Spanish National Institute: <http://www.ine.es/>

Ministerio de Empleo y Seguridad Social/Spanish Ministry of Employment and Social Security: <http://www.empleo.gob.es/index.htm>

International Labour Organization: <http://www.ilo.org/global/lang--es/index.htm>

Subject Guide

1. Information about the subject

| | | | | |
|------------------------------|---|-------------------------|--|----------------------------------|
| SUBJECT | Derecho del Trabajo y Seguridad Social/Labour Law and Social Security | | CODE | GADEMP01-4-010 GECONO01-4-006 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Economics | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Optativa/Elective | N° TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano/English | |
| COORDINATORS/ES | | EMAIL | | |
| FERNANDEZ MARQUEZ OSCAR LUIS | | marquez@uniovi.es | | |
| LECTURERS | | EMAIL | | |
| FERNANDEZ MARQUEZ OSCAR LUIS | | marquez@uniovi.es | | |
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2. Context

The Grades on Economy and Business Administration include Labour Law and Social Security Law as an optional subject within the module “Legal Framework” and the matter “Private Law”. The aim is to provide basic acknowledgement of relevant legal regulations with direct effects on company management and on the economy in general, along with other subjects like Civil Law, Commercial Law, Tax Law and Public Law. On the other hand, Labour Law is also connected to other matters like “Labour Market Economy” and “Sociology of Work and Labour Relations”.

This 6 ECTS subject focuses mainly on the study of the Spanish legal framework on employment, work and social protection, with particular regard to the regulations on employment contracts, working conditions and staff management. The purpose is to make the students acquire adequate skills in regard to dealing with the legal aspects of employment relationships and workforce organization within business and companies.

3. Requirements

There are no previous requirements.

4. Competencies and learning results

General skills:

Critical thinking.

Decision Making.

Implementation of previously acquired knowledge in practice.

Planning and management skills.

Adaptation to new challenges.

Analysis and summarizing.

Search for information skills, in particular in regard to employment and work

Oral and writing communication skills in English Language.

Autonomous work.

Teamwork.

Specific skills:

Legal advising.

Planning and managing Human Resources.

Strategic planning of business.

Organising the structure of companies.

Comprehension of legal framework for company and workforce management.

Comprehension of institutional framework for company management and its impact in decision making.

Learning Results:

Acknowledgement of legal framework and sources.

Interpretation of regulations, texts and other legal instruments.

Critical analysis of legal solutions.

Dealing with legal arguments.

Implementation of previously acquired knowledge to solve problems and cases in practice.

5. Contents

Labour Law and Social Security Law: definition, history and aims

Legal Sources of Labour Law and Social Security Law

Definition and characterization of the employee within the employment relationship

Definition and characterization of the employer within the employment relationship

The employment contract

Types of employment contracts

Work performance and wage

Modifications within the employment relationship

Termination of the employment contract

Representation of workers, collective bargaining, strike and labour conflicts

6. Methodology and working plan

LEARNING METHODOLOGY

In the classroom:

Lessons

Practice and case solution sessions

Small group tutoring

Outside the classroom:

Autonomous work and preparation of cases

PLAN DE TRABAJO

| <i>Topics</i> | <i>Total hours</i> | <i>Lessons</i> | <i>Practice</i> | <i>Tutoring</i> | <i>Evaluation</i> | <i>Total</i> | <i>Autonomous work</i> | <i>Total</i> |
|---------------|--------------------|----------------|-----------------|-----------------|-------------------|--------------|------------------------|--------------|
| | | | | | | | | |

| | | | | | | | | |
|--|--|-----|---|--|--|--|--|--|
| Labour Law and Social Security Law: definition, history and aims | | 2,5 | | | | | | |
| Legal Sources of Labour Law and Social Security Law | | 1,5 | | | | | | |
| Definition and characterization of the employee within the employment relationship | | 4 | 4 | | | | | |
| Definition and characterization of the employer within the employment relationship | | 2 | 2 | | | | | |
| The employment contract Types of employment contracts | | 4 | 4 | | | | | |
| Work performance and wage | | 3 | 2 | | | | | |

| | | | | | | | | |
|---|------------|-----------|-----------|----------|----------|-----------|-----------|-----------|
| Modifications within the employment relationship | | 3 | 3 | | | | | |
| Termination of the employment contract | | 4 | 4 | | | | | |
| Representation of workers, collective bargaining, strike and labour conflicts | | 2 | 2 | | | | | |
| Total | 150 | 26 | 21 | 4 | 2 | 53 | 97 | 97 |

| LEARNING ACTIVITIES | Horas | Porcentajes | |
|----------------------------|-------|-------------|--|
| Lessons | 26 | 17,3% | |
| Practice | 21 | 14% | |
| Small group tutoring | 4 | 2,6% | |
| evaluation | 2 | 1,3% | |
| Individual work | 97 | 64,6% | |
| Total | 150 | 100% | |
| | | | |

7. Evaluation of the student's learning results

The final qualification is the combined result of two elements:

Permanent evaluation: 40% of final qualification. Based on (1) participation in classroom sessions; (2) results in solving problems and cases; (3) oral presentations in the classroom; (4) results in questionnaires or practical exercises subject to evaluation by the lecturer.

Final exam: 60% of final qualification. A minimum result of 3.5 is required for passing.

8. Resources, bibliography and complementary documentation

MANUALES

Antonio Martín Valverde, Fermín Rodríguez Sañudo, Joaquín García Murcia, *Derecho del Trabajo*, Tecnos, Madrid (última edición).

Ignacio García Perrote-Escartín, *Manual de Derecho del Trabajo*, Tirant lo Blanch, Valencia (última edición).

AA.VV, José María Miranda Boto (coord.), *Derecho del Trabajo y de la Seguridad Social para titulaciones no jurídicas*, Tecnos., Madrid (última edición).

MONOGRAFÍAS

E. Borrajo Dacruz, *Introducción al Derecho del Trabajo*, Tecnos, 1994.

A. Guamán Hernández y H. Illueca Ballester, *El huracán neoliberal, una reforma contra el trabajo*, Sequitur, 2012.

J. Mercader Uguina y J. R., García-Perrote Escartín, *Reforma laboral 2012, análisis práctico del RDL 3/2012, de medidas urgentes para la reforma del mercado laboral*, Lex Nova, Valladolid, 2012.

Antonio V. Sempere Navarro y R. Martín Jimenez, *Claves de la reforma laboral de 2012*, Aranzadi, Navarra, 2012.

COMPENDIO NORMATIVO(actualizado de cualquier editorial: Aranzadi, Tecnos, Civitas, La Ley...).

PÁGINAS WEB DE REFERENCIA

www.boe.es

www.bopa.es

www.europa.eu.int

www.ilo.org

www.noticiasjuridicas.com

www.empleo.gob.es

www.tribunalconstitucional.es

www.poderjudicial.es

Subject Guide

1. Information about the subject

| | | | | |
|--------------------------|---|-------------------------|--------------------------------|----------------|
| SUBJECT | Matemática Financiera/Financial Mathematics | | CODE | GADEMP01-4-012 |
| EDUCATIONAL OFFER | Degree in Business Administration | CENTER | Facultad de Economía y Empresa | |
| TYPE | Optativa/Elective | N° TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| Sánchez Álvarez Isidro | | isidro@uniovi.es | | |
| LECTURERS | | EMAIL | | |
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2. Context

Financial Mathematics is included in the *Quantitative Methods* module and classified under the Mathematics label in the bachelor's degree in Business Administration and Management.

The goal of the course is to provide an understanding of the fundamental concepts of financial mathematics. Those concepts are applied in calculating present and accumulated values for streams of cash flows as a basis for analyzing savings plans, loans and bonds. The last unit introduces actuarial mathematics and its life insurance applications.

3. Requirements

Mathematics (code: GADEMP01-1-004).

Foreign students should take into account that basic knowledge of financial mathematics is required. A summary of these prerequisites is available on the web: Niesen, J. (2012), *Financial Mathematics I*, University of Leeds, Chapter 1. Laws and examples focus on the financial markets of Spain. Therefore, at least an A2 level of Spanish is recommended.

4. Competencies and learning results

Generic competencies

- CG05 Ability to search for and analyze work related information
- CG06 Ability to use ICT tools and mathematical software
- CG07 Ability to work autonomously
- CG10 Ability to critically evaluate business decisions
- CG11 Ability to make decisions
- CG12 Ability to apply theoretical knowledge in practice
- CG19 Concern for quality and good work
- CG20 Values and ethical behavior

Specific competencies

- CE06 Identify and apply quantitative tools to the analysis of economic information
- CE07 Design, analyze and solve mathematical models in business and economics
- CE14 Assess the suitability of investment projects and the most appropriate funding
- CE20 Transmit information, ideas, problems and solutions in the field of business management to an audience both skilled and unskilled

Learning outcomes

- RA4.4 Understand the financial valuation principles and their applications
- RA4.5 Analyze the mathematics of the basic financial operations in the Spanish market
- Design and understand the mathematics of new financial products
- Master the use of software for financial valuations, especially spreadsheets
- Understand actuarial valuations and the mathematics of insurance products

5. Contents

Topic 1. Annuities

Topic 2. Savings plans

Topic 3. Loans (I)

Topic 4. Loans (II)

Topic 5. Bonds

Topic 6. Introduction to actuarial mathematics

Annex: Current and credit accounts

COURSE OUTLINE

Topic 1. ANNUITIES

1.1 Annuities: concept and classification

1.2 Level payment annuities

1.3 Varying annuities

1.4 Annuities payable at a different frequency than interest is convertible

Learning objectives

- Annuity-immediate and annuity-due
- Present and future values of annuities
- Perpetuities and deferred annuities
- Varying annuities
- Annuities payable at different frequencies
- Spreadsheet models

Topic 2. SAVINGS PLANS

2.1 General features of savings plans

2.2 Types of savings plans

2.3 Private pensions

Learning objectives

- Level instalments
- Varying instalments and varying interest rates
- Balance: prospective and retrospective method
- Savings schedule
- Spanish private retirement plans
- Spreadsheet models

Topic 3. LOANS (I)

3.1 General features of loan amortization

3.2 Repayment methods

3.3 Adjustable rate loans

Learning objectives

- Level instalments
- Varying instalments and varying interest rates
- Loan balance: prospective and retrospective method
- Repayment schedule

- Floating rate loans
- Spreadsheet models

Topic 4. LOANS (II)

4.1 Annual percentage rate of charge (APRC). TAE

4.2 Present value, usufruct and bare-ownership

4.3 Leasing. Renting

4.4 Reverse mortgages

Learning objectives

- Effective interest rates including additional costs
- Price, usufruct and bare-ownership
- Leasing instalments and amortization schedule
- Renting instalments
- Temporary and lifetime reverse mortgage
- Spreadsheet models

Topic 5. BONDS

5.1 Bonds: concept and classification

5.2 Repayment methods

5.3 Taxes and yields

5.4 Duration and convexity

Learning objectives

- Types, features and risks of bond investments
- Formulas for pricing a bond
- Construction of bond repayment schedules
- Current bond issues
- After-tax yields
- Introduction to interest risk management
- Spreadsheet models

Topic 6. INTRODUCTION TO ACTUARIAL MATHEMATICS

6.1 Survival distributions and life tables

6.2 Life annuities

6.3 Insurances payable at death

6.4 Premiums

Learning objectives

- Static and dynamic life tables
- Valuing contingent payments
- Premium payments

- Spreadsheet models

ANNEX: Current and credit accounts

Learning objectives

- Calculation of interest and fees
- Effective annual rate

Basic references

- Garret, S.J. (2013): *An introduction to the Mathematics of Finance. A Deterministic Approach*. Second Edition. Elsevier.
- Kellison, S.G. (2009), *The Theory of Interest*, 3rd edition, McGraw-Hill.
- Zima, Petr; Brown, RL and Kopp, S. (2007), *Mathematics of Finance*, McGrawHill.

Basic references, in Spanish

- PABLO LÓPEZ, A. (2011): *Valoración financiera*. Editorial Universitaria Ramón Areces.
- MORENO RUIZ, R. et al. (2010): *Matemática de los seguros de vida*. Pirámide.

6. Methodology and working plan

Theoretical sessions are organized as lectures and based on practical applications. Students should have previously read the related resources available on the e-Campus.

Seminars are devoted to solving homework assignments, discussing cases and analyzing practical applications.

Computer lab sessions are focused on spreadsheet models applied to financial mathematics.

The following tables summarize the estimated hours required for each activity:

| | | IN-CLASS ACTIVITIES | OUT-OF-CLASS ACTIVITIES |
|--|--|---------------------|-------------------------|
|--|--|---------------------|-------------------------|

| Topics | Total hours | <i>Lectures</i> | <i>Seminars</i> | <i>Computer lab sessions</i> | <i>Group tutorials</i> | Total hours | <i>Team work</i> | <i>Individual work</i> | Total hours |
|--|--------------------|-----------------|-----------------|------------------------------|------------------------|--------------------|------------------|------------------------|--------------------|
| 1. Annuities | 23 | 3 | 3 | 1 | | 7 | | 16 | 16 |
| 2. Savings plans | 9 | 1,5 | 1,5 | | | 3 | | 6 | 6 |
| 3. Loans (I) | 24 | 4,5 | 4,5 | | | 9 | | 15 | 15 |
| 4. Loans (II) | 21,5 | 3 | 4,5 | 2 | | 9,5 | | 12 | 12 |
| 5. Bonds | 21 | 6 | 3 | | | 9 | | 12 | 12 |
| 6. Introduction to actuarial mathematics | 26,5 | 6 | 4,5 | 1 | | 11,5 | | 15 | 15 |
| Current and credit accounts | 7 | 1 | | | | 1 | | 6 | 6 |
| Term paper | 15 | | | | | 1 | | 15 | 15 |
| Assessment | 3 | 3 | | | | 3 | | | |
| Total hours | 150 | 28 | 21 | 4 | 0 | 53 | 0 | 82 | 82 |
| (%) | 100 | 18,7 | 14 | 2,7 | 0 | 35,4 | 0 | 54,6 | 54,6 |

Schedule (to be updated weekly on the e-Campus)

| Week | In-class activities | Out-of-class activities |
|-------------|---|--|
| 1 | Review of basic concepts. Topic 1: Level annuities. | Basic concepts. Topic 1: level annuities. Homework assignments. |
| 2 | Topic 1: Varying annuities. Other annuities. Spreadsheet models. | Topic 1: Varying annuities. Homework assignments. Spreadsheet exercises. |
| 3 | Topic 2: Savings plans | Topic 2. Homework assignments. |
| 4 | Topic 1 and 2: Seminars. | Prepare first midterm exam. |
| 5 | First midterm exam. Topic 3: Loans. Repayment methods. | Topic 3: Loans. Repayment methods. Homework assignments. |
| 6 | Topic 3: Adjustable rate loans. | Topic 3: Adjustable rate loans. Homework assignments. |
| 7 | Topic 4: Annual Percentage Rate of Charge. TAE. Usufruct and Bare-Ownership. | Topic 4: Annual Percentage Rate of Charge. TAE. Usufruct and Bare-Ownership. Homework assignments. |
| 8 | Topic 4: Leasing. Renting. Reverse mortgages. Spreadsheet models. | Topic 3 and 4. Prepare second midterm exam. Homework assignments. |

| | | |
|-----------|---|--|
| 9 | Second midterm exam. Topic 5: Bonds. Amortization methods. | Topic 5: Bonds. Amortization methods. Homework assignments. |
| 10 | Topic 5: Taxes and yields. Duration and convexity, Spreadsheet models. | Topic 5: Taxes and yields. Duration and convexity. Spreadsheet exercises. |
| 11 | Topic 5: Seminars. | Prepare third midterm exam. |
| 12 | Third midterm exam. Topic 6: Life tables. Life annuities. | Topic 6: Life tables. Life annuities. |
| 13 | Topic 6: Insurance payable at death Spreadsheet models. | Prepare computer lab exam. |
| 14 | Current and credit accounts. Computer lab exam. | Term paper. |

7. Evaluation of the student's learning results

FALL EXAM

Continuous assessment

The final mark will be a weighted average of the marks obtained in the continuous assessment (60%) and the final exam (40%).

In the final exam, midterm exams can be retaken or improved upon in the mark, maintaining the same weighting. Failed midterm exams must be retaken in the final exam. All midterm exams must be passed in order to pass the course. Students have to participate actively in at least 50% of continuous assessment assignments in order to access this assessment option.

Final exam without continuous assessment

Students not having actively participated in at least 50% of continuous assessment, will be evaluated by a final exam with a maximum mark of 6.

Part-time students

Part-time students will be evaluated by a final exam.

SPRING EXAM

Full-time and part-time students will be evaluated by a final exam.

Summary table 1

| Assessment | Activities | Weight in final grade (%) |
|-------------------|------------------------------------|----------------------------------|
| Fall | Continuous assessment + Final exam | 100% |
| | Only final exam | 60% |
| Spring | Closed book exam | 100% |
| Part-time | Closed book exam | 100% |

Summary table 2 (fall)

| Assessment | Activities | Weight in final grade (%) |
|-------------------|-------------------|----------------------------------|
|-------------------|-------------------|----------------------------------|

| | | |
|---|--|-----|
| Continuous assessment | • First midterm exam: Topics 1 and 2 | 20% |
| | • Second midterm exam: Topics 3 and 4 | 20% |
| | • Third midterm exam: Topic 5 | 10% |
| | • Computer lab exam | 10% |
| Final exam <i>(continuous assessment)</i> | Final exam: Topic 6, annex and term paper | 40% |
| | Midterm retakes (only if the student has participated actively in at least 50% of continuous assessment) | 60% |
| Final exam <i>(without continuous assessment)</i> | Closed book exam | 60% |

Honour code

All students must agree to abide by the following code of conduct:

- Answers to homework, quizzes and exams will be their own work, unless otherwise specifically provided.
- Not engage in any activity that will dishonestly improve their results or dishonestly improve/hurt the results of others.
- Avoidance of cheating, plagiarism and improper or illegal use of technology.

Dishonesty will not be tolerated in any form in this class. Any student cheating on an examination or any other class assignment will be given a grade of zero for that examination or class activity and reported for further disciplinary actions.

8. Resources, bibliography and complementary documentation

- Broverman, S. (2008), *Mathematics of Investment and Credit*, 4th edition, ACTEX Publications.
- Fabozzi, F.J. (2006), *Fixed Income Mathematics*, 4th edition, McGraw-Hill
- Garret, S.J. (2013): *An introduction to the Mathematics of Finance. A Deterministic Approach*. Second edition. Elsevier.
- Kellison, S.G. (2009), *The Theory of Interest*, 3rd edition, McGraw-Hill.
- Niesen, J. (2012), *Financial Mathematics I*, University of Leeds.
- Zima, Petr; Brown, RL and Kopp, S. (2007), *Mathematics of Finance*, McGrawHill.

Other references, in Spanish

- MORENO RUIZ; R et al. (2010): *Matemática de los seguros de vida*. Pirámide.
- PABLO LÓPEZ, A. (2013): *Manual práctico de matemática comercial y financiera: Lógica financiera. Rentas. Operaciones a corto plazo*. Editorial Universitaria Ramón Areces.
- PABLO LÓPEZ, A. (2013): *Manual práctico de matemática comercial y financiera: Préstamos y Empréstitos. Riesgo y gestión de renta fija. Leasing, inflación y otras operaciones*. Editorial Universitaria Ramón Areces.
- PABLO LÓPEZ, A. (2011): *Valoración financiera*. Editorial Universitaria Ramón Areces

Additional resources are available on e-Campus: <http://www.uniovi.es/recursos/campusvirtual>

Subject Guide

1. Information about the subject

| | | | | |
|--------------------------------|---|-------------------------|--|----------------------------------|
| SUBJECT | Comercio Exterior/Foreign Trade | | CODE | GADEMP01-4-013 GECONO01-4-004 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Economics | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Optativa/Elective | N° TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| FONSECA PEÑA ALBERTO | | afonseca@uniovi.es | | |
| LECTURERS | | EMAIL | | |
| FONSECA PEÑA ALBERTO | | afonseca@uniovi.es | | |
| BLANCO GONZALEZ JAVIER AVELINO | | blanco@uniovi.es | | |

2. Context

Foreign Trade is an elective course taught in the first semester of the fourth year of the Degrees in *Economics* and in *Business Administration* (ADE in Spanish). For the Degree in Economics, the subject belongs to the *Economía Española, Intenacional y Sectorial* Module, into the *Relaciones Económicas Internacionales* Matter. For the Degree in ADE, the subject belongs to the *Entorno Económico* Module, into the *Relaciones Económicas Internacionales de la Empresa* Matter.

This course is divided into three parts, ranging from the general to the particular:

First part establishes the importance of trade negotiation processes, identifying the actors involved (pressure groups, governments, countries), and the development of these processes. Will be fundamental arguments: the pros and cons of free trade, the role of lobbying and rent-seeking, as well as game theory and negotiation theory. Second part describes the institutional framework in which trading operations, both globally and in the European Union, are developed. In this case, the basic concepts are: the WTO, the Trade Negotiating Rounds (also from an analytical perspective of game theory), and the European Trade Policy.

Third and final part introduces the various forms that internationally oriented companies can use to access to foreign markets, with particular emphasis on export option, which will be studied through various support tools, terminology, issues and specific techniques, and the main actors involved in any transaction of foreign trade. Will basic concepts: the ICEX, international recruitment, logistics, and financing foreign trade operations, among others.

3. Requirements

For proper monitoring of the course, knowledge on World Economics and Microeconomics are required. It is also desirable to have a basic knowledge on the tools of differential calculus.

Additionally, it is recommended monitoring of the course International Economic Relations, for students of the Degree in Business Administration, and the course International Economy, in the case of the Grade in Economics. The combination of these courses allows the student to develop a curriculum oriented to foreign trade and international economic relations. However, it is not necessary to study neither previously mentioned subjects,.

4. Competencies and learning results

General Skills

- Ability to learn.
- . Ability to organize and plan.
- Ability to work and learn independently.
 - Capacity for analysis and synthesis.
 - Ability to work in team.
- Computer skills related to field of study.
- Troubleshooting.
- Work in an international context.
- Recognition of diversity and multiculturalism.
- Management of sources in English
- Critical Thinking.
- Ethical commitment.
- Adapting to new situations.
- Concern for quality.
- Integrate democratic values and culture of peace in the workplace.
- Integrate the principles of equal opportunities and universal access for disabled people in the workplace.

Specific skills

- Understand the logic and dynamics of international trade negotiation processes.
- . Mastering the analysis of the effects of trade barriers.
- . Understand the role of pressure groups in the development of trade policy.
- . Understand the different international growth strategies of the company.
- Understand and analyze the political and economic context in which firms develop their foreign trade activities.
- Meet and coordinate procedures for international transit of goods.

- Be able to manage an international operation import / export.
- Knowing the customs procedures, foreign exchange, tax, credit and insurance, import and export of products.
 - Analyze and use the Information Technology and Communications (ICT) in the field of trade relations.
- Develop entrepreneurship and commercial entrepreneurship.

Learning outcomes:

- Apply the basic concepts and procedures of foreign trade.
- Understand the institutional and economic context in which countries and companies must develop their export activities.
- Use the tools of economic analysis appropriate to evaluate protectionist policies.
- Understand the main challenges facing companies to perform an export operation and discuss possible solutions.
- Manage software tools that allow access, individually and in groups, to information and documents related to export operations.
- Using information technology as a means of communication in an international working environment.
- Discuss and argue multicultural working group the main problems associated with export activity.
- Improve the ability to solve, inform and advise on matters of Foreign Trade.

5. Contents

PART I

1. THE POLITICAL ECONOMY OF TRADE POLICY
2. EXTERNAL SECTOR REGULATION
3. TRADE POLICY INSTRUMENTS
4. COMMERCIAL COOPERATION AND CONFLICT

PART II

5. INTERNATIONAL TRADE NEGOTIATIONS AND THE WTO
6. COMMON COMMERCIAL POLICY IN THE EUROPEAN UNION

PART III

7. THE INSTITUTIONAL FRAMEWORK AND FIRM INTERNATIONALIZATION
8. INTERNATIONAL PROCUREMENT, LOGISTICS AND TRANSPORT
9. FINANCE, MEANS OF PAYMENT AND HEDGING
10. CUSTOM DOCUMENTS AND FOREIGN TRADE

6. Methodology and working plan

The teaching-learning methodology used in the course Foreign Trade is based on the combination of contact and non-contact activities, in any case encouraging active student participation, by introducing elements of dialogue and argument over the classes, with the intention to assess their understanding on the issues explained. In this discipline the theory and practice form a seamlessly integrated, so that it is not permissible to approach a learning method without considering the practice as an integral part, which attempts to put students in touch with reality and with the confrontation of theoretical knowledge. For this reason, we conducted classroom practices that involve the resolution of cases in which students acquire an active role, using previously acquired knowledge and identifying gaps and doubts that may arise in its implementation.

Students have several basic and support materials to complement both theoretical and practical aspects of the subject. National and international organizations websites are used, where relevant and updated information can be obtained. In addition to the above material, there is a student Virtual Campus with useful material.

It follows the methodology proposed in this subject, which appears listed in the following activities:

- Classroom activities

- Lectures. We will use the model of "lecture", offering the most important influence of each topic, master the exposure time and present a particular way of working and studying the subject.
- Classroom practices. We will use the "participatory model" as it is intended prevail communication among students and between students and teacher.
- Group tutorials. We will use the "participatory model" as it is intended prevail communication among students and between students and teacher.
- Assessment sessions. Written tests theoretical and practical to assess student progress.

- supervised work

Independent work of the student. i) study-related content "lectures", ii) the related study "practical classes" and iii) solving activities, case studies and exercises suggested through the Virtual Campus.

The following is an estimate of the number of hours for each activity:

| | |
|------------------------|------|
| 1. Classroom | |
| 1. Lectures | 24.5 |
| 2. Classroom Practices | 21 |
| 3. Group tutorials | 4 |
| 4. Evaluation sessions | 3.5 |
| 2. Independent work | 97 |

7. Evaluation of the student's learning results

The assessment of learning outcomes be based on continuous assessment and final examination.

1. - Continuous assessment

This type of evaluation can gather information about each student. In the lectures, practices or through the virtual campus, the teacher will propose a set of activities to be undertaken by students. These activities (finding relevant information, comments, resolution of cases, exercises, discussions, etc..) will be voluntary. However, its implementation in a timely manner will be very useful in solving the continuous assessment tests that the teacher will propose to be made without prior notice throughout the course.

2. - Final exam.

It is the overall assessment conducted at the end of the learning process, which quantifies and evaluates the process via a rating. Its basic purpose will be to measure the level of the student at the end of the course.

The final exam will be a multiple choice questions test, covering both theoretical and practical issues.

Rating System

In the final grade for this course continuous assessment will count for 40%. The continuous assessment mark will come from spot tests that the teacher will be made without prior notice throughout the course. Both these tests and the final exam, which will mean the remaining 60% of the final grade, pursue discriminate individual compliance objectives.

Regardless of the continuous assessment score to pass the course must exceed 50% of the maximum score of the test.

The continuous assessment mark is valid for ordinary and extraordinary calls through the academic year in which students are enrolled.

3. Differentiated Assessment .

In the case of students who have obtained authorization by the Centre for this type of evaluation, the final test (to be held at the time of the final exam) will consist in the final exam itself, which provide up to 60 % of the mark, and a written additional test, with a maximum weight of 40% of the final mark.

8. Resources, bibliography and complementary documentation

All materials to be distributed in class (lectures, outlines, case-studies, exercises) will be available to the alumni in the Virtual Campus.

Bibliography

PARTS I and II

. Bengoechea, A. et al. (2002): *Economía internacional. Cuestiones y ejercicios resueltos*, Prentice Hall, Madrid (Spanish).

. Feenstra, R. C. and Alan M. Taylor (2010, 2nd ed.): *International trade*, Worth Publishers, New York.

. Krugman, P. R., M. Obstfeld and M. J. Melitz (2012, 9th ed.): *International economics. Theory and Policy*, Prentice Hall, New Jersey.

PART III

- . Billon, M. and M. P. Sanchez (1999): *Ejercicios prácticos de comercio exterior*, Akal Ediciones, Madrid (Spanish).
- . ICEX (2005): *Operativa y práctica de comercio exterior*. Curso básico, Madrid (Spanish).
- ICEX (2005): *Estrategia y gestión del comercio exterior*. Curso superior, Madrid (Spanish).

Further reading

PARTS I and II

- . Appleyard, D. R. and A. J. Field (2013, 8th Ed): *International Economics*, McGraw-Hill/Irwin, New York.
- . Baldwin, R. and C. Wyplosz (2012, 4th Ed.): *The economics of european integration*, McGraw-Hill, Berkshire.
- . Lindert, P. H. (1994): *Economía internacional*, Ariel, Barcelona (Spanish).
- . Pugel, T.A. (2011, 15th Ed): *International Economics*, McGraw-Hill, New York.
- . Tugores, J. (2006): *Economía internacional. Globalización e integración regional*, McGraw-Hill, Madrid (Spanish).

PART III

- . Daniels, J.D. et al. ((2010 13th Ed): *International Business. Environments and Operations*, Prentice Hall, New Jersey.

Websites

- World Trade Organization (World Trade Organization): www.wto.org
- The European Union: http://europa.eu.int/index_es.htm
- ICEX: www.icex.es
- Chambers of Commerce: www.camaras.com
- . COFIDIS: www.cofidis.es

Subject Guide

1. Information about the subject

| | | | | |
|--------------------------|---|-------------------------|--|----------------------------------|
| SUBJECT | Análisis Competitivo de la Empresa/Competitive Analysis | | CODE | GADEMP01-4-026 GECONO01-4-001 |
| EDUCATIONAL OFFER | Degree in Business Administration and Management Degree in Economics | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Optativa/Elective | N° TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| Lopez Mielgo Nuria | | nlopez@uniovi.es | | |
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| LECTURERS | | EMAIL | | |
| Lopez Mielgo Nuria | | nlopez@uniovi.es | | |

2. Context

This is an optional subject in the Degrees of Business Administration and Economics. In the Bachelor's degree in Business Administration it belongs to the module "Organization and Management" and the topic "Principles of Management". In the Bachelor's degree in Economics it belongs to the module "Business Organization" and the topic "Principles of Management". It is scheduled in the first semester and it complements previous courses on Strategic Management and Economics. The role of the subject is to analyze the dynamics of competitive interaction in markets, building skills on strategic thinking.

3. Requirements

The prerequisites to follow this subject are just those that regulate admission into the degree.

4. Competencies and learning results

General competences

CG1: Capability for analysis and synthesis

CG2: Learning capability

CG3: Capability for fluent oral and written communication in mother tongue

CG4: Knowledge and understanding of other languages, mainly English

CG5: Skill at searching for and analyzing information in the working environment

CG6: Capability for using ICT tools

CG7: Capability for working independently

CG8: Capability for teamwork

CG10: Critical and self-critical capability

CG11: Decision-making capability

CG12: Capability for putting knowledge into practice

CG13: Creativity for finding new ideas and solutions

CG14: Initiative and enterprise

CG16: Organization and planning capability

CG17: Negotiation capability

CG18: Adaptability

CG19: Concern for quality and good work

CG20: Values and ethics

Specific Competences:

CE1 (Business; Economics): To know the legal and social background to markets and firms

CE3 (Business) **CE7** (Economics): To understand the basic functioning and structure of markets

CE5 (Business) **CE6** (Economics): To understand the economic and institutional environment and its impact on business decisions

CE7 (Business) **CE4** (Economics): To propose, analyze and solve mathematical models in the business and economics areas

CE10 (Business): To draw up the company's strategic plans

CE20 (Business) **CE17** (Economics): To transmit information, ideas, problems and solutions in the area of business management to a specialist or non-specialist audience.

Learning Results:

- To identify the internal and environmental factors that drive the competitive strategy of the firm
- To understand the dynamics of competition within markets and to describe these dynamics in terms of game theory
- To master strategic thinking about competitive analysis

5. Contents

Short contents

Lesson 1. Introduction to competitive analysis

Lesson 2. Game theory

Lesson 3. Competition models

Lesson 4. Entry and exit

Lesson 5. Rivalry and collusion

Extended contents and learning objectives**Lesson 1. Introduction to competitive analysis**

1.1. Competitors and competition

1.2. Strategic behavior

1.3. Industry analysis

Learning objectives

- Understand how to delimit the boundaries of a market for competitive analysis
- Understand the meaning of competitive interdependence and strategic behavior
- Understand the forces that mediate competitive behavior and results in a market

Basic textbooks:

- o Besanko D., Dranove D., Shanley M. and S. Schaefer (2013), *Economics of Strategy*, 6th Ed., International Student Version, John Wiley & Sons
- o González E. y J. Ventura (2013), *Análisis Competitivo de la Empresa*, Lulu

Lesson 2. Game theory

- 2.1. Introduction
- 2.2. Static games
- 2.3. Dynamic games
- 2.4. Repeated games
- 2.5. Limitations of game theory

Learning objectives

- Represent competitive interaction in terms of games
- Master the skills to act in a rational way in a competitive game
- Solve games applying game theory rules and equilibrium solutions
- Interpret results and implications for strategic behavior
- Think strategically. Anticipate future moves in the game.

Basic textbooks:

- o Dixit A., Reiley, D. and S. Skeath (2009), *Games of Strategy*, 3rd Ed., W.W. Norton & Co.
- o Dixit A. and B. Nalebuff (2010), *The Art of Strategy: A Game Theorist's Guide to Success in Business and Life*, Norton & Co..
- o González E. y J. Ventura (2013), *Análisis Competitivo de la Empresa*, Lulu

Lesson 3. Competition models

3.1. Measuring market structure

3.2. Perfect competition

3.3. Monopoly

3.4. Oligopoly

3.5. Microdynamics

Learning objectives

- To compute and interpret concentration indexes
- To assess market structure
- Understand the underpinnings of competitive interaction under different scenarios
- Understand the implications of competing with strategic substitutes or strategic complements
- To develop the capability to solve basic competition models from which more complex models will emerge in future lessons and future courses

Basic textbooks:

- Besanko D., Dranove D., Shanley M. and S. Schaefer (2013), *Economics of Strategy*, 6th Ed., International Student Version, John Wiley & Sons
- González E. y J. Ventura (2013), *Análisis Competitivo de la Empresa*, Lulu

Lesson 4. Entry and exit

4.1. Basic concepts

4.2. Entry-deterring strategies

4.2.1. Capacity expansion

4.2.2. Limit pricing

4.2.3. Predatory pricing

4.2.4. Product proliferation

Learning objectives

- Identify the variables that mediate the reactions of incumbent firms under the threat of new competition
- Anticipate the most likely reactions of incumbent firms
- Identify the strategies that incumbents may use in order to send signals of hostility
- Evaluate the credibility of promises and threats related to entry using game theory reasoning
- Think strategically anticipating likely outcomes

Basic textbooks:

- o Besanko D., Dranove D., Shanley M. and S. Schaefer (2013), *Economics of Strategy*, 6th Ed., International Student Version, John Wiley & Sons
- o Douma S. and H. Schreuder (2008), *Economic Approaches to Organizations*, 4th Ed., Prentice Hall.
- o González E. y J. Ventura (2013), *Análisis Competitivo de la Empresa*, Lulu

Lesson 5. Rivalry and collusion

5.1. Determinants of rivalry

5.2 Explicit collusive agreements

5.3. Competitive discipline and tacit collusion

5.3.1. Impediments to coordination

5.3.2. Facilitating practices

Learning objectives

- Know the factors that mediate rivalry in a market
- Evaluate the determinants of the feasibility of collusion in a market
- Identify strategies that facilitate collusion
- Think strategically about dynamic competitive interaction
- Know the elements that are common in explicit collusive agreements

Basic textbooks:

- o Besanko D., Dranove D., Shanley M. and S. Schaefer (2013), *Economics of Strategy*, 6th Ed., International Student Version, John Wiley & Sons
- o González E. y J. Ventura (2013), *Análisis Competitivo de la Empresa*, Lulu

6. Methodology and working plan

Learning methodology includes both, activities which require attendance and activities which do not.

In-class activities

Lectures: Sessions aimed at introducing and developing the key ideas and concepts of each topic. They involve classroom presentations with audio-visual support. A basic bibliography will be available for students in order to help following and understanding these lectures.

Seminars: They are aimed at developing practical contents within each topic and solve exercises. They involve interaction between the professor and the students. Students are expected to discuss issues and cases, critically formulate their own arguments, and solve problems related to the topics covered in each lesson.

Group tutorials: These sessions are aimed at solving questions, verifying that students understand and develop the contents correctly, suggesting students

complementary bibliography, and checking the progress of teamwork. They will be structured in small groups in order to get a personal interaction teacher-student and provide extra help related to the particular difficulties of each student.

Evaluation sessions: To control the learning progress of the student.

Out-of-class activities.

Individual work: It is basically related to (1) studying the contents introduced in the lectures, and (2) preparing in advance the necessary material in order to be able to attend the seminars.

Team work: Each student will participate in a team which will elaborate an essay on a topic related to the course contents. This work is aimed at developing the student's teamwork skills, as well as competences and skills related to gathering information, analyzing and summarizing contents, developing arguments and making public presentations.

Materials needed to correctly undertake all the activities will be available online at the university's e-Campus —teaching notes, readings, questions... The e-Campus also gives students the opportunity to develop discussion forums.

The following table summarizes a breakdown of different activities by lesson.

| | | In class activities | Out-of-class activities |
|--|--|---------------------|-------------------------|
|--|--|---------------------|-------------------------|

| Lessons | Total Hours | <i>Lectures</i> | <i>Seminars</i> | <i>Computer Classroom Practices</i> | <i>Group Tutorials</i> | <i>Evaluations Sessions</i> | Total | <i>Team Work</i> | <i>Individual Work</i> | Total |
|--------------------|--------------------|-----------------|-----------------|-------------------------------------|------------------------|-----------------------------|--------------|------------------|------------------------|--------------|
| Lesson 1 | 20.5 | 4.5 | 3 | | | | 7.5 | 3 | 10 | 13 |
| Lesson 2 | 30 | 4.5 | 4.5 | | | | 9 | 6 | 15 | 21 |
| Lesson 3 | 30 | 4.5 | 4.5 | | | | 9 | 6 | 15 | 21 |
| Lesson 4 | 31 | 5.5 | 4.5 | | | | 10 | 6 | 15 | 21 |
| Lesson 5 | 31 | 5.5 | 4.5 | | | | 10 | 6 | 15 | 21 |
| All lessons | 4 | | | | 4 | | 4 | | | |
| Evaluation process | 3.5 | | | | | 3.5 | 3.5 | | | |
| Total Hours | 150 | 24.5 | 21 | | 4 | 3.5 | 53 | 27 | 70 | 97 |
| (%) | 100 | 16.3 | 14 | | 2.7 | 2.3 | 35.3 | 18 | 46.7 | 64.7 |

| ACTIVITIES | | Hours | % | Total |
|--------------|-----------------|-------|------|-------|
| In-class | Lectures | 24.5 | 16.3 | 53 |
| | Seminars | 21 | 14 | |
| | Group Tutorials | 4 | 2.7 | |
| | Assessment | 3.5 | 2.3 | |
| Out-of-class | Team work | 27 | 18 | 97 |
| | Individual work | 70 | 46.7 | |
| Total | | 150 | | |

7. Evaluation of the student's learning results

The following table shows the grading process that will be followed in this subject. Both, the grading process and the weights of the different activities on the final grade will be used also in the extraordinary evaluation. Controlled assessment activities will not be repeated in extraordinary evaluations. However, the student's grade of controlled assessment in the ordinary evaluation will be kept for extraordinary evaluations.

To pass the course students must obtain a minimum of 5 points as result of adding both, the controlled assessment and the final exam. However, a minimum of 2

points is required (in the 6 point) final exam to pass the course.

Summary Table

| Assessment | Activities | Weight in final grade (%) |
|-------------------------------------|---|---------------------------|
| <p>Controlled assessment</p> | <ul style="list-style-type: none"> <li data-bbox="412 775 1570 943">· Activity 1: Students will have to complete various learning assignments individually. In order to be evaluated the student has to: (I) fulfill each assignment, (II) personally hand in the written paper to the teacher, and (III) participate in the classroom discussion about the assignment. The teacher will inform students about the submission deadline for each assignment. Students are also expected to actively participate in the seminar sessions. <li data-bbox="412 1054 1554 1118">· Activity 2: Team-work. The students will be required to make a presentation of this work in the classroom. | <p>25</p> |

| | | |
|-------------------|--|----|
| | | 15 |
| Final exam | <p>· Final exam.</p> <p>Note that, despite of the grade achieved as a result of the controlled assessment, a minimum of 2 points is required in the final exam to pass the course.</p> | 60 |

For those students following a differentiated evaluation process, the assessment process will consist on undertaking a 10 point final exam. The exam will take place the same day and hour that the ordinary exam and will comprehend the following:

- 1) The same theoretical and practical questions included in the exam of those students following the ordinary assessment process. This part of the exam will have a maximum grading of 6 points.
- 2) One or two additional questions of a practical nature similar to the ones undertaken through the controlled assessment process. This part of the exam will have a maximum grading of 4 points.

8. Resources, bibliography and complementary documentation

This course is available on e-Campus. This site gives access to the course guide, the slides, teaching materials (cases, readings, ...) and some other multimedia resources (videos, podcasts, etc.). We will use the e-Campus on a regular basis to communicate important information about assignments, deadlines and other events.

Basic textbook in English

- o Besanko D., Dranove D., Shanley M. and S. Schaefer (2013), *Economics of Strategy*, 6th Ed., International Student Version, John Wiley & Sons

Basic textbook in Spanish

- o González E. y J. Ventura (2013), *Análisis Competitivo de la Empresa*, Lulu

Other textbooks

- o Dixit A., Reiley, D. and S. Skeath (2009), *Games of Strategy*, 3rd Ed., W.W. Norton & Co.
- o Dixit A. and B. Nalebuff (2010), *The Art of Strategy: A Game Theorist's Guide to Success in Business and Life*, Norton & Co.
- o Douma S. and H. Schreuder (2008), *Economic Approaches to Organizations*, 4th Ed., Prentice Hall.
- o Ventura, J. (2008), *Análisis Estratégico de la Empresa*, Thomson Paraninfo, Madrid.

Subject Guide

1. Information about the subject

| | | | | |
|---------------------------------|--|-------------------------|--|----------------|
| SUBJECT | Análisis Estadístico de Datos/Statistical Data Analysis | | CODE | GADEMP01-4-028 |
| EDUCATIONAL OFFER | Degree in Business Administration Degree in Economics | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Optativa/Elective | N° TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| RAMOS CARVAJAL MARIA DEL CARMEN | | cramos@uniovi.es | | |
| LECTURERS | | EMAIL | | |
| PRESNO CASQUERO MARIA JOSE | | mpresno@uniovi.es | | |
| LANDAJO ALVAREZ MANUEL | | landajo@uniovi.es | | |
| FERNANDEZ VAZQUEZ ESTEBAN | | evazquez@uniovi.es | | |
| RAMOS CARVAJAL MARIA DEL CARMEN | | cramos@uniovi.es | | |

2. Context

| | | | | |
|---------------|--------------------------------------|---------------|-----------------------------------|------------------------------------|
| NAME | Statistical Data Analysis | | CODE | GADEMP01-4-028 / GECONO01-4-002 |
| Degree | Business Administration Economics | CENTER | Faculty of Economics and Business | |

| | | | | | | |
|---------------------------|--------------|-----------------------------------|---------|--|---|--|
| TYPE | Optional | TOTAL NUMBER OF CREDITS | 6 | | | |
| PERIOD | 2nd semester | LANGUAGE | English | | | |
| COORDINATOR | | PHONE / EMAIL | | | LOCATION | |
| Esteban Fernández Vázquez | | 985105056 / evazquez@uniovi.es | | | 2nd. Floor, Wing 4, Office No. 12 | |
| LECTURERS | | PHONE / EMAIL | | | LOCATION | |
| Manuel Landajo Alvarez | | 985105055/ landajo@uniovi.es | | | 2nd. Floor, Wing 4, Office No. 13 | |
| | | | | | | |

Statistics plays an important role in the development of society. That is why it is included in degrees in Business Administration (MBA) and Economics of Spanish and European universities. Statistical studies are organized in the degrees of Business Administration and Economics in the University of Oviedo through a set of basic training courses, compulsory and optional.

Thus, in the second half of 1st course we find the subject called *Introduction to Economic Statistics*, with an identical program in the degrees in Business Administration, Economics, Accounting and Finance, and Labor Relations and Human Resources. It presents the main tools of descriptive and economic statistics. In the second 2nd course we find the courses *Statistical Methods for Business* (within the BA degree) and *Statistical and Econometric methods* (in the Economics degree), which study contents of probability calculus and statistical inference.

Courses on statistics continue in the third and fourth years of the degree. In the third year students take a course in *Econometrics*, which is mainly focused on estimating and testing econometric models.

In the fourth year, the optional course *Statistical Data Analysis*, examines a set of statistical tools that are commonly applied in economic analysis. Students in this course can solve real problems of data collection and analysis. Also, the course addresses a set of statistical techniques aimed at quality control and decision making in the economic /business areas. In addition to the interaction between statistical subjects themselves, and as a natural consequence of its instrumental role in the curriculum, the skills that these subjects provide are used in other more specific degree subjects.

3. Requirements

A basic knowledge of descriptive and inferential statistics is required

- Basic statistical knowledge (e.g., averages, dispersion measures, two-dimensional distributions), discussed in courses *Introduction to Economic Statistics* course.
- Basic knowledge on inferential statistics (courses on *Statistical Methods for Business* in the degree of Business, or *Statistical and Econometric Methods* in the degree of Economics)
- Mathematical knowledge to understand proofs.

4. Competencies and learning results

Upon completion of the course students should be able to acquire the following skills:

- Ability for analysis and synthesis.
- Learning ability.
- Ability to research and analyze information sources in the field of work.
- Ability to use computer and communication technologies.
- Ability to work independently.
- Self-critical ability.
- Ability to apply knowledge into practice.
- Concern for quality and a job well done.
- Ability to make decisions.

The **specific skills** developed in the course are:

- To design and conduct survey sampling
- To manage and interpret specific software for data processing
- To make exploratory data analysis
- To identify and apply appropriate quantitative tools to analyze univariate and multivariate economic data.
- To apply statistical tools for quality control.
- To produce reports summarizing the statistical analysis, concerning both the design of the survey and the main findings of the research.

5. Contents

I: INTRODUCTION TO SAMPLE DESIGN

Lesson 1: Survey sampling.

Lesson 2: Sample size determination.

II: STATISTICAL QUALITY CONTROL

Lesson 3: Introduction to statistical quality control.

III: MULTIVARIATE ANALYSIS

Lesson 4: Test for two populations: Analysis of Variance.

Lesson 5: Principal component analysis.

Lesson 6: Contingency tables: correspondence analysis.

Lesson 7: Cluster analysis

6. Methodology and working plan

The course is divided into 6 lessons grouped in 3 blocks as described previously. The teaching of each topic is based on three types of activities: lectures, classroom practices, and sessions at the computer lab. The working plan for classroom activities is structured as follows:

- Lectures: These classes will analyze the overall motivation of the subject based on real situations in the field of economics and business. They give an overview of the theoretical part of each topic, with particular attention to key concepts and important developments.
- Classroom practice: These sessions will solve theoretical and practical issues and statistical exercises related to economic and business environment, supported by the tools introduced in the lectures.
- Practices in the computer lab/tutoring group: The spreadsheet and additional software for statistical analysis will be the main working tool in these practices. The knowledge acquired in these sessions will provide students with the skills to work independently with the software and solve the cases proposed along the course.

The teaching methodology and work plan of the course relies on the Virtual Campus www.campusvirtual.uniovi.es, in two ways:

- As a useful tool to solve doubts and download educational materials, since students will have beforehand all the necessary materials for the supervision of the course: presentations for lectures, statements and data bases for practice, a collection of practical proposals for independent work and solved problems for each of the parts of the program.
- As an area of active student participation in the learning process.

The following table summarizes the distribution of time devoted to each type of activity of the subject. In class activities described above, 61.33% of the total workload of the course is added for distance learning activities.

| | | WORK REQUIRING ATTENDANCE | | | | | WORK NOT REQUIRING ATTENDANCE | |
|----------------|--------------------|---------------------------|---------------------------|-------------------------------------|----------------------------|--------------|-------------------------------|--------------|
| <i>Lessons</i> | <i>Total hours</i> | <i>Lectures</i> | <i>Practical sessions</i> | <i>Sessions in the computer lab</i> | <i>Assignment sessions</i> | <i>Total</i> | <i>Individual work</i> | <i>Total</i> |
| 1 | 10 | 3 | 0.5 | 1.5 | | 5 | 5 | 5 |
| 2 | 17 | 4 | 1 | 4 | | 9 | 8 | 8 |
| 3 | 16.5 | 4 | 2 | 2.5 | | 8.5 | 8 | 8 |
| 4 | 20 | 4 | 1 | 3 | | 8 | 12 | 12 |
| 5 | 17.5 | 4 | 0.5 | 2 | | 6.5 | 11 | 11 |
| 6 | 19 | 4 | 1 | 2 | | 7 | 12 | 12 |
| 7 | 20 | 4 | 1 | 2 | | 7 | 13 | 13 |
| Final exam | 30 | | | | 7 | 7 | 23 | 23 |

| | | | | | | | | |
|--------------|------------|--------------|-------------|--------------|-------------|--------------|--------------|--------------|
| Total | 150 | 27 | 7 | 17 | 7 | 58 | 92 | 92 |
| (%) | | 18.00 | 4.67 | 11.33 | 4.67 | 38.67 | 61.33 | 61.33 |

Teaching in the second semester of 2014-2015 academic year is divided into 15 weeks. The following table is an estimated schedule of the subject, which may vary slightly depending on the weekly teaching organization of each group.

| Week | Class work | Individual work |
|-------------|---|---|
| 1 | Presentation of the course. Lesson 1.- Survey sampling | Study of lesson 1 Review of materials |
| 2 | Lesson 1.- Survey sampling | Study of lesson 1 Review of materials |
| 3 | Lesson 1.- Survey sampling Lesson 2: Sample size determination | Study of lessons 1 y 2 Review of materials |
| 4 | Lesson 2: Sample size determination | Study of lesson 2 Review of materials |
| 5 | Lesson 2: Sample size determination | Study of lesson 2 |

| | | |
|-----------|---|---|
| | | Review of materials |
| 6 | Lesson 3: Introduction to statistical quality control | Study of lesson 3 Review of materials |
| 7 | Lesson 3: Introduction to statistical quality control | Study of lesson 3 Review of materials |
| 8 | Lesson 4: Test for two populations: Analysis of Variance | Study of lesson 3 Review of materials |
| 9 | Lesson 4: Test for two populations: Analysis of Variance | Study of lesson 4 Review of materials |
| 10 | Lesson 4: Test for two populations: Analysis of Variance | Study of lesson 4 Review of materials |
| 11 | Lesson 5: Principal component analysis | Study of lesson 5 Review of materials |
| 12 | Lesson 5: Principal component analysis | Study of lesson 5 Review of materials |
| 13 | Lesson 6: Contingency tables: correspondence analysis | Study of lessons 5 and 6 Review of materials |
| 14 | Lesson 6: Contingency tables: correspondence analysis Lesson 7: Cluster analysis | Study of lessons 6 and 7 Review of materials |

| | | |
|----|----------------------------|---|
| 15 | Lesson 7: Cluster analysis | Study of lessons 6 and 7 Review of materials Preparation for final exam |
|----|----------------------------|---|

7. Evaluation of the student's learning results

The evaluation of the course is based on two elements:

1. **Continuous assessment** of the effort and the work developed by students throughout the course, through different types of individual activities. The weight on the final score is 40%.
2. **Final exam**, to assess the knowledge acquired by students and their ability to apply statistical tools to analyze and solve study problems in the economic and business fields. The weight of the exam in the final score is 60%.

Grading System

In all calls (ordinary and extraordinary), the final grade (GFINAL) is obtained as a weighted average of final exam grades (GEXAM) and continuous assessment (GCONTINUOUS):

$$\mathbf{GFINAL = 0.6 \times GEXAM + 0.4 \times GCONTINUOUS}$$

Differentiated assessment

For students benefiting from the system of differentiated assessment, the final exam will keep the weight of 60%. The activities of continuous assessment performed by full-time students throughout the semester will be replaced by several theoretical and practical issues, with a weight of 40%.

8. Resources, bibliography and complementary documentation

The main teaching resources for the course are available at the Virtual Campus www.campusvirtual.uniovi.es (presentations, case studies, documents, et cetera).

Basic Bibliography

HAIR, J.F. et al. (2009): Multivariate Data Analysis. Ed. Prentice Hall.

NEWBOLD, P., CARLSON, W., THORNE, B. (2008): Statistics for Management and Economics. Ed. Prentice Hall.

Additional bibliography

LOHR, S (2009): Sampling: Design and Analysis. Brooks Cole. Cengage Learning. MONTGOMERY, D. C. (2012): Statistical Quality Control. Ed. Willey.

Software

Sessions in the computer lab will be based on the spreadsheet and specific statistical software.

Subject Guide

1. Information about the subject

| | | | | |
|------------------------------|--|-------------------------|---|----------------|
| SUBJECT | Métodos Estadísticos y Econométricos/Statistical and Econometric Methods | | CODE | GECONO01-2-008 |
| EDUCATIONAL OFFER | Degree in Economics | CENTER | Facultad de Economía y Empresa School of Business Administration | |
| TYPE | Obligatoria/Compulsory | N° TOTAL CREDITS | 9.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano/English | |
| COORDINATORS/ES | | EMAIL | | |
| VICENTE CUERVO MARIA ROSALIA | | mrosalia@uniovi.es | | |
| LECTURERS | | EMAIL | | |
| LOPEZ MENENDEZ ANA JESUS | | anaj@uniovi.es | | |
| PEREZ SUAREZ RIGOBERTO | | rigo@uniovi.es | | |
| CASO PARDO MARIA COVADONGA | | ccaso@uniovi.es | | |
| RIO FERNANDEZ MARIA JESUS | | mjrio@uniovi.es | | |
| VICENTE CUERVO MARIA ROSALIA | | mrosalia@uniovi.es | | |
| GARCIA MUÑIZ ANA SALOME | | asgarcia@uniovi.es | | |

2. Context

Statistical and Econometric Methods is a compulsory course in the first semester of the second year of the Degree in Economics which follows on from the first year's *Introduction to Economic Statistics* course.

The overall objective of *Statistical and Econometric Methods* is to provide students with a set of statistical tools in order to solve problems based on sample information. The contents of the course are organized around lectures, practical classes and lab sessions, which will allow students to develop a series of skills as described in section 4.

3. Requirements

None

4. Competencies and learning results

Contents and teaching methodology have been designed in order to provide students with the following set of general and specific skills:

General skills

Capability for analysis and synthesis.

Learning capability.

Capability for fluent oral and written communication in mother tongue.

Skill at searching for and analysing information in the working environment.

Capability for using ICT tools.

Capability for working independently.

Critical and self-critical capability.

Decision-making capability.

Capability for putting knowledge into practice.

Capability for creatively finding new ideas and solutions.

Adaptability.

Concern for quality and good work.

Specific skills

Identify and apply appropriate quantitative tools for the analysis of economic information.

Propose, analyse and resolve mathematical models in the economic and business area.

Handle and interpret specific software for data processing.

Understand how an economy functions on an aggregate level and assess the impact of changes on how agents behave or on the institutional framework.

Transmit information, ideas, problems and solutions from economics to either a specialist or a non-specialist audience.

Issue advisory reports on specific situations of the economy (international, national or regional) or of economic sectors.

Learning outcomes

By the end of the *Statistical and Econometric Methods* course, students will be able to:

Use probability models in order to describe the behaviour of random variables.

Apply inferential statistical tools to solve economic and business problems.

Use statistical software for problem-solving.

Estimate econometric models.

Handle econometric software in order to obtain estimates, carry out hypothesis testing and predictions.

Issue, present and discuss reports on the estimated econometric models and the obtained predictions.

5. Contents

The main goal of this course is for students to properly use a set of statistical and econometric tools which are fundamental in order to solve problems dealing with sample information.

Course contents are organized in three parts. The first part deals with probability, random variables and the main probability distributions that are used in Economics. The second part introduces some key concepts related to sample studies and estimation, and covers inferential statistical tools: confidence intervals and hypothesis testing. Finally, the third part introduces econometric methods, including the simple and basic linear models, their estimation and significance tests. The main criteria used for the validation and selection of econometric models are also introduced, analyzing some empirical examples.

Course contents are as follows:

FIRST PART: PROBABILITY

Unit 1.- Uncertainty and probability

1.1.- Uncertainty and random experiments.

1.2.- Axiomatic definition of probability.

1.3.- Conditional probability and independence.

1.4 .- Total Probability and Bayes' Theorem.

Unit 2.- Random variables

2.1.- Random variable. Discrete and continuous variables

2.2.- Probability distribution of a random variable

2.3.- Characteristics of random variables. Expected value and dispersion

Unit 3.- Probability models

3.1.- Binomial distribution

3.2.- Geometric distribution

3.3.- Hypergeometric distribution

3.4.- The normal model

3.5.- Other probability distributions

Unit 4.- Random vectors. The Central Limit Theorem

4.1.- K-dimensional random variables and their characteristics

4.2.- Aggregating random variables

4.3.- The Central Limit Theorem and its applications

SECOND PART: STATISTICAL INFERENCE**Unit 5.- Introduction to Statistical Inference. Samples and estimators**

5.1.- Inferential methods. Populations and samples

5.2.- Parameters and estimators

5.3.- Properties of estimators

5.4.- Methods for finding estimators

Unit 6.- Interval estimation

6.1.- Estimating parameters. Associated probability models

6.2.- Confidence intervals

6.3.- Confidence intervals for common parameters

6.4.- Sample size determination

Unit 7.- Hypothesis testing

- 7.1.- Hypothesis testing framework
- 7.2.- Types of error, significance level and power of a test
- 7.3.- Significance tests. P-value

Lesson 8.- Parametric tests

- 8.1.- Hypothesis testing for the mean
- 8.2.- Hypothesis testing for the proportion
- 8.3.- Hypothesis testing for the variance
- 8.4.- Tests for comparing two populations

Unit 9.- Nonparametric tests

- 9.1.- Normality tests
- 9.2.- Test for independence
- 9.3.- Other nonparametric tests

THIRD PART: ECONOMETRIC METHODS

Unit 10.- Econometric models. The simple linear model

- 10.1.- Econometric modeling. Stages
- 10.2.- The simple linear model. Specification and basic assumptions
- 10.3.- Estimating regression parameters. Properties
- 10.4.- Tests associated with a model. Goodness of fit
- 10.5.- Prediction

Unit 11.- The basic linear model. Estimation

- 11.1.- The basic linear model. Specification and assumptions
- 11.2.- Least squares and maximum likelihood estimation
- 11.3.- Properties and characteristics of estimators

- 11.4.- Model assessment

- 11.5.- Forecasting

Unit 12.- Tests and model selection

- 12.1.- Significance tests. F and t tests

- 12.2.- Testing linear restrictions
- 12.3.- Comparing and selecting models. Information measures
- 12.4.- The multicollinearity problem
- 12.5.- Extending the basic linear model

6. Methodology and working plan

There are three types of classes in this course:

Lectures: During these 1.5 hour-sessions, students will be introduced to the main concepts and methods of each unit. Learning resources to follow these classes will be available at the Virtual Campus.

Practical sessions: During these 1.5 hour-sessions, practical issues and exercises will be covered by means of the statistical and econometric tools previously explained in the lectures.

Lab sessions: Each class will be divided into small groups of students in order to work in the computer lab. Lab sessions last one hour and constitute a basic part of students' learning given the applied nature of this course. During lab sessions students will have to deal with examples closer to real world problems by means of the appropriate software. The software Gretl is used in the course.

Learning resources are available at the University of Oviedo's Virtual Campus (www.campusvirtual.uniovi.es). In addition to learning materials (lectures presentations, tests, databases, useful links), the course website provides a series of tools for students' active participation and communication both with teachers and other students, through e-mail and forums. All course information will be uploaded in the website: course calendar, grades, surveys...

The following table summarizes course workload by type of activity and unit.

| | | | |
|--|--|----------------------------------|--------------------------------------|
| | | WORK REQUIRING ATTENDANCE | WORK NOT REQUIRING ATTENDANCE |
|--|--|----------------------------------|--------------------------------------|

| <i>Units</i> | <i>Total hours</i> | <i>Lectures</i> | <i>Practical classes</i> | <i>Computer Lab classes</i> | <i>Total</i> | <i>Individual work</i> |
|--------------|--------------------|-----------------|--------------------------|-----------------------------|--------------|------------------------|
| 1 | 10.5 | 2 | 1.5 | 1 | 4.5 | 6 |
| 2 | 12.5 | 2.5 | 1 | 0 | 3.5 | 9 |
| 3 | 15 | 2.5 | 1.5 | 1 | 5 | 10 |
| 4 | 17.5 | 3 | 1.5 | 1 | 5.5 | 12 |
| 5 | 15.5 | 2.5 | 1 | 1 | 4.5 | 11 |
| 6 | 17.5 | 3 | 1.5 | 1 | 5.5 | 12 |
| 7 | 12 | 2.5 | 1.5 | 1 | 5 | 7 |
| 8 | 17.5 | 3 | 1.5 | 1 | 5.5 | 12 |
| 9 | 11.5 | 1.5 | 1 | 1 | 3.5 | 8 |
| 10 | 18.5 | 3 | 2 | 1.5 | 6.5 | 12 |
| 11 | 20 | 4 | 2.5 | 1.5 | 8 | 12 |
| 12 | 20.5 | 3.5 | 3 | 2 | 8.5 | 12 |

| | | | | | | |
|-----------------------|-------------|-----------|-------------|-----------|-----------|------------|
| Continuous assessment | 16 | 2 | 2 | 2 | 6 | 10 |
| Final Exam | 20.5 | | | | 4.5 | 16 |
| Total | 225 | 35 | 21.5 | 15 | 76 | 149 |

| Types | | Hours | % | Total |
|------------|---------------------|-------|-----|-------|
| Class work | Lectures | 35 | 16% | 76 |
| | Practical sessions | 21.5 | 10% | |
| | Lab sessions | 15 | 7% | |
| | Assessment sessions | 4,5 | 2% | |
| Homework | Individual work | 149 | 66% | 149 |
| | Total | 225 | | |

7. Evaluation of the student's learning results

The final course grade, for all examination periods, is the result of a weighted mean that takes into account the final exam (60%) and the continuous assessment-related activities (40%).

Continuous assessment-related activities include a series of problem sets to be carried out over the semester and the grade will be kept for all examination periods.

For students in the system of differentiated assessment, the final exam will keep the weight of 60% and continuous assessment activities performed throughout the semester will be replaced by theoretical and practical issues the different contents of the program, with a weight of 40 %.

| | Weight over final grade | | Assessed competences |
|---|-------------------------|---------------------|--|
| Final Exam | 60% | | Capability for analysis and synthesis. Capability for putting knowledge into practice. Decision-making capability. Capability for creatively finding new ideas and solutions. |
| Continuous assessment-related activities | 40% | Problem sets | Learning capability. Capability for using ICT tools. Capability for working independently. |

- Problem sets are to be done over the semester and will allow the evaluation of the extent to which students assimilate course contents, as well as their abilities to use statistical tools and software. Once these activities have been evaluated, grades will be published and the most common mistakes will be explained in order to avoid them in future activities.

For students in the system of differentiated assessment, the final exam will keep the weight of 60% and continuous assessment activities will be replaced by theoretical and practical issues about the different contents of the program, with a weight of 40 %.

8. Resources, bibliography and complementary documentation

Learning resources for this course are available at the University of Oviedo's Virtual Campus (www.campusvirtual.uniovi.es).

Basic reference:

PÉREZ, R. y LÓPEZ, A.J. (2011): *Métodos Estadísticos para Economía y Empresa*, Creative Commons, <http://goo.gl/z05TR>

Further reading:

ADKINS, L. (2013): *Using gretl for Principles of Econometrics*, 4th Edition, Oklahoma State University, http://www.learneconometrics.com/gretl/using_gretl_for_POE4.pdf

BEHAR, R. y GRIMA, P. (2004): *55 Respuestas a dudas típicas de Estadística*. Ed. Díaz de Santos.

CANAVOS, G.C. (1990): *Probabilidad y Estadística*. Ed. McGraw-Hill.

CAO, R. y otros (2001): *Introducción a la Estadística y sus aplicaciones*. Ed. Pirámide.

CASAS, J.M. y otros (1998): *Problemas de Estadística*. Ed. Pirámide.

DIEZ; M.D. et al (2012): *OpenIntro Statistics* (2nd edition), [online] <http://www.openintro.org/stat/down/OpenIntroStatSecond.pdf>

ESTEBAN, M.V. y otros (2009): *Econometría básica aplicada con Gretl*, Sarriko On, Universidad del País Vasco, <http://www.sarriko-online.com/cas/fichas/2009/08-09.pdf>

GREENE, W.H. (2011): *Econometric Analysis*, (7th edition), Pearson Education Limited.

LLORENTE, F. y otros (2001): *Inferencia estadística aplicada a la empresa*. Ed. Centro de Estudios Ramón Areces.

MARTÍN-PLIEGO, F.J.; MONTERO, J.M. y RUIZ-MAYA, L. (2006): *Problemas de probabilidad*. Ed. Thomson.

NEWBOLD, P. et al (2012): *Statistics for Business and Economics*, (8th edition). Pearson Education Limited.

PALACIOS, F. y otros (2004): *Ejercicios resueltos de inferencia estadística y del modelo lineal simple*. Ed. Delta Universidad.

PERALTA, M.J. y otros (2000): *Estadística. Problemas resueltos*. Ed. Pirámide.

PEREZ, R. (2010): *Nociones básicas de Estadística*. [online] <http://goo.gl/vjhiK>

PÉREZ, R. y LÓPEZ, A.J. (1997): *Análisis de datos económicos II. Métodos inferenciales*. Ed. Pirámide.

PRIETO, L. y HERRANZ, I. (2005): *Qué significa estadísticamente significativo?* Díaz de Santos Ediciones.

PULIDO, A., PÉREZ, J. (2001): *Modelos Econométricos*. Ed. Pirámide.

RAMANATHAN, R. (2002), *Introductory Econometrics with Applications*, [Harcourt College Publisher](#)

SERRANO, G.R. y MARRERO, G.A. (2001): *Ejercicios de Estadística y Econometría*. Ed. AC.

WALPOLE, R.E. et al (2012): *Probability & Statistics for Engineers and Scientists* (9th edition), Pearson Education Limited.

WOOLDRIDGE, J.M. (2008): *Introductory Econometrics: A Modern Approach*. Ed. South-Western.

Software:

The statistical software used in this course is the open source statistical package Gretl, which is available for download at: <http://gretl.sourceforge.net/>

COTTRELL, A.; LUCHETTI, R.: *Gretl User's Guide*,

<http://ricardo.ecn.wfu.edu/pub/gretl/manual/en/gretl-guide-a4.pdf>

Subject Guide

1. Information about the subject

| | | | | |
|----------------------------|--|-------------------------|---|----------------|
| SUBJECT | Análisis y Control de Gestión/Analysis and Control | | CODE | GECONO01-2-001 |
| EDUCATIONAL OFFER | Degree in Economics | CENTER | Facultad de Economía y Empresa School of Economics and Business Administration | |
| TYPE | Obligatoria/Compulsory | N° TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano/English | |
| COORDINATORS/ES | | EMAIL | | |
| Fernández Rodríguez Emilia | | efrodi@uniovi.es | | |
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2. Context

According to the Bachelor's Degree in Economics Curriculum, *Financial Statement Analysis and Management Control* is included in the module of *Organization and Management*, specifically under the heading *Accounting*, and will provide students with basic skills and knowledge of key concepts that will be very useful in the *Management Accounting* course (fourth year). The contents of this course are tightly related to subjects such as Introduction to Accounting, Introductory Microeconomics and Microeconomics I, as well as to Organization Design, Marketing, Mathematics and Statistics.

This course will enable students to develop general and specific competences that will be fundamental in order to succeed in their professional environment. The contents included in the course will provide the students with basic skills and knowledge of key concepts to draw up and analyse information for those decisions studied by Economic Theory. Moreover, as users of financial information, students should be able to correctly interpret financial statements to assess the financial position and performance of the company that has produced them.

3. Requirements

It is highly recommended that students review the content of the first-year course *Introduction to Accounting*. The course also requires knowledge of the microeconomic models which describe how a company works. In addition, the student should be competent in basic mathematical and statistical operations.

4. Competencies and learning results

The **generic competencies** which students will develop in *Financial Statement Analysis and Management Control* include:

- Ability for abstract and analytical thinking, and synthesis of ideas.
- Capacity to learn and stay up-to-date with learning.
- Ability to communicate both orally and in writing in English.
- Ability to search for, process and analyse information from a variety of sources.
- Ability to use information and communications technologies (ICT).
- Ability to work autonomously.
- Ability to work in a team.
- Ability to work in an international context.
- Ability to be critical and self-critical.
- Ability to make reasoned decisions.
- Ability to apply knowledge in practical situations.
- Capacity to generate new ideas (creativity).
- Ability to take the initiative and to foster the spirit of entrepreneurship and intellectual curiosity.
- Leadership capability.
- Organization and planning capability.
- Ability to interact with others in a constructive manner, even when dealing with difficult issues.
- Ability to adapt to and act in new situations.
- Ability to evaluate and maintain the quality of work produced.
- Ability to act on the basis of ethical reasoning.
- Integration of democratic values and of the culture of peace in the working environment.
- Integration of the principles of equal treatment and opportunities for men and women in the working environment.
- Integration of the principles of equal opportunities and universal access for the disabled in the working environment.

Students will also develop the following **specific competencies** upon completion of the course:

- Identify and apply appropriate quantitative tools to the analysis of economic information.
- Propose, analyse and solve mathematical models in the economic and business field.
- Use and interpret specific data-processing software.
- Prepare and analyse internal and external accounting information for management control and decision making.
- Transmit information, ideas, problems and solutions in the field of business management both to a specialist and non-specialist audience.

As far as student **learning outcomes** are concerned, the knowledge and skills that students will achieve upon successful completion of the course will enable them to:

- Design appropriate techniques and tools of analysis which facilitate a company's decision-making process.
- Interpret business financial statements to evaluate the financial position of real companies, the success of their operations, and gain an insight into their future performance.
- Identify, record and report relevant economic and financial data to allow informed business decision making.
- Issue advisory reports on specific companies and market situations for a variety of users.
- Analyse and interpret company Annual Accounts.

5. Contents

The following table shows the abbreviated programme of the course *Financial Statement Analysis and Management Control*:

Abbreviated Programme

| |
|--|
| Unit 1: Management Accounting fundamentals. |
| Unit 2: The relationship between Microeconomics and Management Accounting. |
| Unit 3: An introduction to cost terms and concepts. |
| Unit 4: Cost-Volume-Profit analysis. |
| Unit 5: The Annual Accounts. |
| Unit 6. Liquidity and solvency analysis. |
| Unit 7. Profitability analysis. |

The detailed programme of the course, along with the specific objectives of each unit are listed below:

Detailed Programme and Unit Learning Objectives

Unit 1. Management Accounting fundamentals.

1.1. Management Accounting as a source of information for internal parties within the organization.

- 1.2. Nature of Management Accounting.
- 1.3. Scope of Management Accounting.
- 1.4. The two main functions of Management Accounting.

Overall objective of the unit:

This unit looks at the users of accounting information and their requirements, and describes the different functions of Management Accounting.

Specific learning objectives:

- Distinguish between the different branches of Accounting and identify the functions of a Management Accounting system.
- Distinguish between data and information and understand that information elaboration procedures are fundamental to create an effective information system.
- Identify the functions, users, objectives and characteristics of Management Accounting.
- Identify the two main functions of Management Accounting.

Unit 2. The relationship between Microeconomics and Management Accounting.

- 2.1. Basic concepts of the theories of production and costs: a practical approach.
- 2.2. Necessary information to achieve scale, technical and allocative efficiency.
- 2.3. Determining the costs of products and services.
- 2.4. Responsibility Accounting: accumulating costs by responsibility centres to evaluate their effectiveness.

Overall objective of the unit:

Accounting is an empirical discipline. It is partly related to Microeconomics and therefore the relationship between both disciplines is studied in order to take advantage of their consistent theoretical framework and the amount of information they provide.

Specific learning objectives:

- Compare the assumptions of Microeconomics with Accounting information.
- Identify the information used by managers to run their businesses efficiently.
- Distinguish between different types of costs for different purposes.

Unit 3. An introduction to cost terms and concepts.

3.1. Costs and cost terminology.

3.2. Direct and indirect costs.

3.3. Cost classification by nature.

3.4. Variable and fixed costs. Separation of costs into their variable and fixed elements.

3.5. Relevant and avoidable costs.

3.6. Cost assignment.

Overall objective of the unit:

This unit analyses the difference in the economic and accounting concepts of cost and explains costs and their different classifications.

Specific learning objectives:

- Identify the technical and economic components of cost.
- Distinguish between a direct and an indirect cost, and between a fixed and a variable cost.
- Identify and describe the different methods of estimating the cost function of a company.
- Assess the cost structure of a company.
- Use opportunity costs when presenting relevant information for decision-making.
- Apply the guidelines for refining a costing system.

Unit 4. Cost-Volume-Profit analysis.

4.1. Cost-Volume-Profit assumptions.

4.2. Breakeven point.

4.3. Margin of safety.

4.4. Sensitivity analysis.

4.5. Multi-product Cost-Volume-Profit analysis.

4.6. Extensions of breakeven analysis.

Overall objective of the unit:

This unit examines the relationship between changes in activity and changes in total sales revenue, costs and net profit.

Specific learning objectives:

- Identify the assumptions on which Cost-Volume-Profit analysis is based.
- Explain the meaning of contribution margin, contribution margin ratio, margin of safety and percentage margin of safety.
- Apply Cost-Volume-Profit analysis in a multi-product setting.
- Use Cost-Volume-Profit analysis as a tool for decision-making.

Unit 5. The Annual Accounts.

5.1. Introduction.

5.2. The Balance Sheet.

5.3. The Income Statement.

5.4. The Statement of Cash Flows.

5.5. The Statement of Changes in Equity

5.6. Notes to the Annual Accounts.

5.7. The Consolidated Annual Accounts.

Overall objective of the unit:

This unit explains general features of the Annual Accounts in accordance with the Spanish General Accounting Plan (PGC), introducing their format and content.

Specific learning objectives:

- Identify and interpret the main items that make up the Balance Sheet.
- Identify and interpret the main items that make up the Income Statement.
- Identify and interpret the main items that make up the Statement of Cash Flows.
- Identify and interpret the main items that make up the Statement of Changes in Equity.
- Identify the information disclosed in the Notes to the Annual Accounts.
- Introduce the Consolidated Annual Accounts.

Unit 6. Liquidity and solvency analysis.

6.1. Analysis of the equilibrium of financial structure.

6.2. Techniques and ratios for financial analysis.

6.2.1. Short-term financial analysis.

6.2.2. Long-term financial analysis.

Overall objective of the unit:

The main purpose of this unit is to explain various indicators and techniques to analyse the liquidity and solvency of a company.

Specific learning objectives:

- Identify, evaluate and interpret the different financial positions a company can face.
- Calculate and interpret commonly used ratios for assessing the position and performance of a business both in the short-term and in the long-term.

Unit 7. Profitability Analysis.

7.1. Analysis of the Income Statement.

7.2. Profitability ratios.

7.3. Financial leverage (gearing).

Overall objective of the unit:

The main purpose of this unit is to explain various indicators and techniques to analyse a company's ability to generate wealth for their owners and other stakeholders.

Specific learning objectives:

- Interpret the main headings and subtotals of the Income Statement.
- Calculate and interpret profitability ratios.
- Calculate and interpret financial leverage.

6. Methodology and working plan

The teaching-learning methodology used in the course *Financial Statement Analysis and Management Control* is based on a combination of in-class and out-of-class activities, in both cases encouraging active student participation. The proposed methodology of the course includes the following activities, described below:

In-class activities: 60 hours

- *Lectures*. Lectures are aimed at presenting the key concepts and theoretical aspects of the subject, which are illustrated with numerous examples. The course will foster active participation and student engagement.
- *Practical sessions*. These activities involve discussing and solving cases and exercises which will help students consolidate their understanding of the subject and develop their capability for analysis by applying previously acquired theoretical knowledge. Active-learning techniques will be used in order to encourage student participation and interpersonal interaction among students, as well as between the instructor and students.
- *Group tutorials*. Instructional activity conducted by a faculty member in order to review and discuss the materials and topics presented in class.
- *Evaluation session*. Written exam consisting of theoretical questions and practical exercises to assess student progress.

Out-of-class activities: 90 hours.

- *Student's individual work*. It is based on three types of activities: study of the theoretical aspects related to "lectures", study of the practical aspects related to "practical sessions" and, when appropriate, out-of-class practice activities or completion of homework assignments.

The following tables summarise the distribution of time for each type of activity:

| Activity | Hours | Hours (%) | |
|--------------------------------|--------------------|-------------------|----------|
| In-class activities | Lectures | 28 | |
| | Practical sessions | 21 | |
| | Group tutorials | 4 | |
| | Evaluation session | 7 | |
| | Other activities | | |
| Out-of-class activities | Individual work | 90 | 90 (60%) |
| Total | 150 | 150 (100%) | |

| | | |
|--|----------------------|--------------------------|
| | In-class work | Out-of-class work |
|--|----------------------|--------------------------|

| Units | Total hours | Lectures | Practical sessions | Group tutorials | Evaluation session | Total | Individual work | Total |
|--------------------|-------------|---------------|--------------------|-----------------|--------------------|------------|-----------------|------------|
| Unit 1 | 12 | 3 | 1 | | | 4 | 8 | 8 |
| Unit 2 | 16 | 4 | 2 | | | 6 | 10 | 10 |
| Unit 3 | 25 | 5 | 5 | | | 10 | 15 | 15 |
| Unit 4 | 24 | 5 | 4 | | | 9 | 15 | 15 |
| Unit 5 | 16 | 3 | 1 | | | 4 | 12 | 12 |
| Unit 6 | 24 | 5 | 4 | | | 9 | 15 | 15 |
| Unit 7 | 22 | 3 | 4 | | | 7 | 15 | 15 |
| All the units | 11 | | | 4 | 7 | 11 | | |
| Total hours | 150 | 28 | 21 | 4 | 7 | 60 | 90 | 90 |
| (%) | 100% | 18.67% | 14% | 2.67% | 4.67% | 40% | 60% | 60% |

7. Evaluation of the student's learning results

The following methods will be used to evaluate student performance:

1. **Continuous assessment.** It involves the analysis of the various stages the student will go through during the learning process so as to assess student progress and then produce evaluation results from these periodic assessments. This method of assessment is based on active commitment of students to in-class activities, objective follow-up tests and theoretical and practical quizzes, resolving cases, exercises and practical activities, writing reviews about readings and other materials. When a student's activity negatively affects the normal development of a class, this will be borne in mind when considering the student's continuous assessment.
2. **Final exam.** It is the overall assessment that takes place at the end of the learning process, which quantifies and evaluates student performance with a grade. Its primary purpose will be to

measure the level of student achievement at the end of the course.

Grading system

The final grade, in both the May 2016 and June/July 2016 exams, will be a weighted average of scores on the continuous assessment and the final examination, with a weighting of 40% for the continuous assessment and 60% for the final exam.

However, the continuous assessment marks expire at the end of each academic year. Therefore, the final examination scheduled for January 2017 will be worth 10 points and account for 100% of the final grade.

Summary table 1

| Evaluations | Grading system | Weight in the final grade (%) |
|-----------------------------------|-----------------------|-------------------------------|
| May 2016 and June/July 2016 exams | Continuous assessment | Continuous assessment: 40% |
| | + Final exam | Final exam: 60% |
| January 2017 exam | Final exam | Final exam: 100% |

The top score on the continuous assessment (4 points out of 10) can be achieved as follows: during lectures and in-class practical sessions, throughout the term, students will take two objective tests, each one accounting for a maximum of 2 points. The first test will cover Units 1 to 4, while the second one will cover Units 5 to 7. Should tests be made up of multiple-choice and/or true/false questions, scoring rules will penalize wrong answers.

Summary table 2

| Assessment | Activities and evaluation | Maximum grade (out of 10) |
|-----------------------|--|---------------------------|
| Continuous assessment | During lectures and in-class practical sessions: two tests | 4 |
| Final exam | Written test with both theoretical questions and practical exercises | 6 |

Successful completion of the course is achieved when the student attains a final passing grade of 5 points or above (out of 10).

Alternative Assessment for Part-Time Students

Students certified as registered part-time students, according to article 7 of the "[Rules for the evaluation of learning results and the abilities acquired by students](#)", will be assessed through a single final exam, which will take place on the same date for all the students of the course. This final exam accounts for a maximum of 10 points.

8. Resources, bibliography and complementary documentation

Management Control: Bibliography in English

Basic bibliography:

DRURY, C. (2009): *Management accounting for business*, Cengage Learning EMEA, Andover.

Supplementary bibliography:

HORGREN, Ch.T.; DATAR, S.M.; FOSTER, G.; RAJAN, M. y ITTNER, C. (2009): *Cost accounting. A managerial emphasis*, Pearson Education Limited, Upper Saddle River.

RAYBURN, L.G. (1996): *Cost accounting: using a managerial approach*, Times Mirror, Chicago.

Management Control: Bibliography in Spanish

Basic bibliography:

GARCÍA SUÁREZ, J.L. (Coord): ARIAS ÁLVAREZ, A.M.; GARCÍA CORNEJO, B.; MACHADO CABEZAS, A. y PÉREZ MÉNDEZ, J.A. (2010): *Cálculo, análisis y gestión de costes. Guía práctica para su aplicación en la empresa*, Ediciones Delta, Madrid.

GARCÍA SUÁREZ, J.L. (Coord): ARIAS ÁLVAREZ, A.M.; GARCÍA CORNEJO, B.; MACHADO CABEZAS, A. y PÉREZ MÉNDEZ, J.A. (2012): *Cálculo de costes y control de gestión: 70 casos de aplicación*, Ediciones Delta, Madrid.

Supplementary bibliography:

AMAT, O.; SOLDEVILLA, P. y AGUILÁ, S. (2003): *Ejercicios resueltos de contabilidad de costes*, Gestión 2000, Barcelona.

BLANCO, I. AIBAR, B. y RÍOS, S.L. (2001): *Contabilidad de costes. Cuestiones, supuestos prácticos resueltos y propuestos*, Prentice Hall, Madrid.

HORNGREN, Ch.T. y FOSTER, G. (2007): *Contabilidad de costos. Un enfoque gerencial*, Prentice-Hall Hispano Americana, México.

LÓPEZ, A. y MENÉNDEZ, M. (1990): *Curso de contabilidad interna*, AC, Madrid.

LÓPEZ GONZÁLEZ, E.; MENDAÑA CUERVO, C. y RODRÍGUEZ FERNÁNDEZ, M.A. (1998): *Ejercicios de contabilidad de costes y de gestión*, Pirámide, Madrid.

RIPOLL, V.M. y BALADA, T.J. (2005): *Información de costes para la toma de decisiones empresariales*, Ediciones Gestión 2000.

ROSANAS MARTÍ, J.M. (1999): *Contabilidad de costes para la toma de decisiones*, Desclee de Brouwer, Bilbao.

SÁEZ TORRECILLA, A.; FERNÁNDEZ FERNÁNDEZ, A. y GUTIÉRREZ DÍAZ, G. (2008): *Contabilidad de costes y contabilidad de gestión, (Volumen I y II)*, Mc Graw-Hill, Madrid.

Financial Statement Analysis: Bibliography in English

ATRILL, PETER; AND MCLANEY, EDDIE (2013a): *Accounting and finance for non-specialists*, Eighth Edition, Prentice Hall (Pearson Education), England.

ATRILL, PETER; AND MCLANEY, EDDIE (2013b): *Financial accounting for decision makers*, Seventh Edition, Prentice Hall (Pearson Education), England.

ELLIOTT, BARRY; AND ELLIOTT, JAMIE (2012): *Financial accounting and reporting*, Fifteenth Edition, Prentice Hall (Pearson Education), England.

FRASER, LYN M.; AND ORMISTON, AILEEN (2013): *Understanding financial statements*, Tenth Edition, Pearson Education, England.

SCHOENEBECK, KAREN P.; AND HOLTZMAN, MARK P. (2013): *Interpreting and analyzing financial statements. A project-based approach*, Sixth Edition, Prentice Hall (Pearson Education), New Jersey.

SUBRAMANYAM, K.R.; AND WILD, JOHN J. (2009): *Financial statement analysis*, Tenth Edition, McGraw-Hill International Edition.

TRACY, JOHN A. (2009): *How to read a financial report. For managers, entrepreneurs, lenders, lawyers, and investors. Wringing vital signs out of the numbers*,

Seventh Edition, John Wiley and Sons, New Jersey.

WALSH, CIARAN (2008): *Key management ratios. The 100+ ratios every manager needs to know*, Fourth Edition, Prentice Hall (Pearson Education), England.

Financial Statement Analysis: Bibliography in Spanish

AMAT i SALAS, O. (2008): *Análisis integral de empresas. Claves para un chequeo completo: desde el análisis cualitativo al análisis de balances*, Bresca Editorial, S.L., Barcelona.

ARCHEL DOMENCH, P.; LIZARRAGA DALLO, F.; SÁNCHEZ ALEGRÍA, S. y CANO RODRÍGUEZ, M. (2012): *Estados contables. Elaboración, análisis e interpretación*, Pirámide, Madrid.

DE JAIME ESLAVA, J. (2008): *Las claves del análisis económico-financiero de la empresa*, ESIC Editorial, Madrid.

GONZÁLEZ PASCUAL, J. (2011): *Análisis de la empresa a través de su información económico-financiera. Fundamentos teóricos y aplicaciones*, Pirámide, Madrid.

GONZÁLEZ PASCUAL, J. (2011): *Análisis de la empresa a través de su información económico-financiera. Aplicaciones prácticas*, Pirámide, Madrid.

GUTIÉRREZ VIGUERA, M. (2011): *Análisis contable para directivos*, CISS, Valencia.

PÉREZ-CARBALLO VEIGA, J.F. (2010): *Diagnóstico económico-financiero de la empresa*, ESIC Editorial, Madrid.

RIVERO TORRE, P. (2009): *Análisis de balances y estados complementarios*, Pirámide, Madrid.

RIVERO TORRE, P. (2012): *Análisis de balances y estados complementarios. Ejercicios resueltos y comentados*, Pirámide. Madrid.

ROJO RAMÍREZ, A. (2011): *Análisis económico-financiero de la empresa. Un análisis desde los datos contables*, Garceta, Madrid.

VARIOS AUTORES (2014): *Manual de Análisis de los Estados Financieros*, Ediuno Servicio de Publicaciones de la Universidad de Oviedo, Oviedo.

VARIOS AUTORES (2014): *Supuestos de Análisis de los Estados Financieros*, Ediuno Servicio de Publicaciones de la Universidad de Oviedo, Oviedo.

Financial Statement Analysis: Rules and Regulations in English

Spanish General Accounting Plan (Plan General de Contabilidad Español. English translation), Instituto de Contabilidad y Auditoría de Cuentas, Madrid, <http://www.icac.meh.es>.

Financial Statement Analysis: Rules and Regulations in Spanish

Real Decreto 1514/2007, de 16 de noviembre, por el que se aprueba el Plan General de Contabilidad (BOE de 20 de noviembre).

Real Decreto 1515/2007, de 16 de noviembre, por el que se aprueba el Plan General de Contabilidad de Pequeñas y Medianas Empresas y los criterios contables específicos para microempresas (BOE de 21 de noviembre).

Additional resources will be available at: <https://www.innova.uniovi.es/servicios/campusvirtual>

Students may also visit the following websites:

| Organization | Website |
|--|---|
| Asociación Española de Contabilidad y Administración de Empresas (AECA) | http://www.aeca.es |
| Banco de España | http://www.bde.es |
| Base de Datos SABI | http://buo.uniovi.es |
| Comisión Nacional del Mercado de Valores (CNMV) | http://www.cnmv.es |
| Instituto de Contabilidad y Auditoría de Cuentas (ICAC) | http://www.icac.meh.es |
| International Accounting Standards Board (IASB) | http://www.iasb.org |
| Registros Mercantiles | http://www.registradores.org |

Subject Guide

1. Information about the subject

| | | | | |
|-------------------------------------|---|-------------------------|--|----------------|
| SUBJECT | Economía de la Unión Europea/ Economics of the European Union | | CODE | GECONO01-2-002 |
| EDUCATIONAL OFFER | Degree in Economics | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | Nº TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
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| ARGUELLES VELEZ MARGARITA | | marguel@uniovi.es | | |

2. Context

The subject contributes to provide the student with knowledge about business economic framework. It is a complement to other previous courses, such as 'World Economy' and 'Spanish Economy'.

3. Requirements

No particular requirements are needed. Knowledge of other subjects, such as 'World Economy' and 'Spanish Economy' would be useful.

4. Competencies and learning results

The aim includes not only to provide students with the knowledge about the theoretical basis of economic integration, but to give them the skills necessary to understand facts and policies of European wide project.

Moreover, the competencies defined at 'VERIFICA' constitute a large variety of possibilities to improve the qualities of a professional in the area of Applied Economics.

Their code numbers are

CG1, CG2, CG4, CG5, CG6, CG7, CG8, CG9, CG10, CG11,CG12, CG13, CG18, CG19,CG20, CG21, CG22, CG23 (general c.) & CE3, CE6, CE7, CE8, CE9, CE10, CE11, CE12, CE17 and CE18 (specific c.)

Learning output

1 Understanding the basics of the EU. Students must be able to discuss them with colleagues

2 Applying concepts and methods of Economics to make a technical analysis of EU matters

3:Using economic instruments to identify interdependence relations

4: Improving students' capability to find information about the EU. They would be able to distinguish the quality of different documents

5: Using Information and Communication Technology (ICT) tools in relation to EU

6: Using Information and Communication Technology (ICT) as a tool to promote communication all around the world

7: Improving student competence in situations of international discussion

8: Improving student ability to carry out and to communicate reports about the EU

9: Increasing the autonomous work, both in the sense of individual task and team collaboration.

5. Contents

I AN INTRODUCTION TO THE EUROPEAN UNION

1. A Theoretical and Historical Approach
2. The EU Institutional System
3. EU Budget
4. Causes of Economic Growth in EU

II HOW DOES THE EUROPEAN SINGLE MARKET WORK?

5. An Analysis of Economic Integration
6. The Internal Market of the European Union
7. Competition Policy in the EU
8. Employment Strategy and Social Affairs Policy

III THE SINGLE CURRENCY

9. Economic and Monetary Union
10. Framing Macroeconomic Policies of EMU

BIBLIOGRAPHY

DEUTSCHE BANK DB RESEARCH (2013): *The European Single Market 20 Years On*

http://www.dbresearch.com/PROD/DBR_INTERNET_EN-PROD/PROD000000000322897/The+Single+European+Market+20+years+on%3A+Achievements,+unfulfilled+expectations+%26+further+potential.pdf

EICHENGREEN, B. (2007): *The European Economy Since 1945 Coordinated Capitalism and Beyond*. Princeton University Press. New Jersey

GRAUWE, P. (2012): *Economics of Monetary Union*. Oxford University Press.UK.

PETERSON, J. & Shackleton, M. (2012) *The Institutions of the EU*. Oxford University Press. UK.

TSOUKALIS, L. (2014): *The Unhappy State of the Union. Europe Needs a New Grand Bargain*. Policy Network, UK.

6. Methodology and working plan

In-class teaching will be based on theoretical and practical sessions. It will be complemented by continuous assessment activities (linked to *follow-up questions* and *readings*) and by tutorials.

Theoretical classes will consist of lectures. Practical classes will develop cases, analysis and debates to link theoretical matters to reality.

| | | IN-CLASS WORK | | | | | OUT-OF-CLASS WORK | | |
|----------------|---|------------------------|----------------------------|--------------|-------------------|------------------------|-------------------|----|----|
| <i>Lessons</i> | <i>Classroom practice , including computer classroom practice</i> | <i>Group tutorials</i> | <i>Assessment sessions</i> | <i>Total</i> | <i>Group work</i> | <i>Autonomous work</i> | <i>Total</i> | | |
| 1 | 9 | 3 | 0 | - | - | 3 | - | 6 | 6 |
| 2 | 9 | 3 | 0 | - | - | 3 | - | 6 | 6 |
| 3 | 16,5 | 1,5 | 3 | - | - | 4,5 | - | 12 | 12 |
| 4 | 10,5 | 0 | 4,5 | - | - | 4,5 | - | 6 | 6 |

| | | | | | | | | | |
|--------------------|------------|-----------|-----------|------------|------------|-------------|------------|-----------|-------------|
| 5 | 9 | 3 | 0 | - | - | 3 | - | 6 | 6 |
| 6 | 9 | 3 | 0 | - | - | 3 | - | 6 | 6 |
| 7 | 18 | 1,5 | 4,5 | - | - | 6 | - | 12 | 12 |
| 8 | 18 | 3 | 3 | - | - | 6 | - | 12 | 12 |
| 9 | 18 | 3 | 3 | - | - | 6 | - | 12 | 12 |
| 1 | 18 | 3 | 3 | - | - | 6 | - | 12 | 12 |
| Other activities | 15 | - | - | 4 | 4 | 8 | 7 | - | 7 |
| Total hours | 150 | 24 | 21 | 4 | 4 | 53 | 7 | 90 | 97 |
| % | 100 | 16 | 14 | 2,7 | 2,7 | 35,4 | 4,6 | 60 | 64,6 |

7. Evaluation of the student's learning results

Evaluation is based on the written examination, to be held on the day fixed by the Faculty (and published by it at <http://econo.uniovi.es/>), and on continuous assessment activities. The weight of written examination is 60% and the continuous assessment activities have a weight of 40%.

Every student must obtain no less than 2 (two) points at the final exam to take benefit from the continuous assessment.

There will be a complementary exam (valuated 4 points) for students involved in special grading proceedings whom therefore do not participate into the continuous assessment process.

8. Resources, bibliography and complementary documentation

Presentations, documents, reviews and links are available at UnioviVirtual platform.

Subject Guide

1. Information about the subject

| | | | | |
|-----------------------------|---|-------------------------|--|----------------|
| SUBJECT | Economía Internacional/ International Economy | | CODE | GECONO01-3-003 |
| EDUCATIONAL OFFER | Degree in Economics | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | N° TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano/English | |
| COORDINATORS/ES | | EMAIL | | |
| ROSAL FERNANDEZ IGNACIO DEL | | irosal@uniovi.es | | |
| LECTURERS | | EMAIL | | |
| FONSECA PEÑA ALBERTO | | afonseca@uniovi.es | | |
| ROSAL FERNANDEZ IGNACIO DEL | | irosal@uniovi.es | | |

2. Context

It is a compulsory course in the Bachelor of Economics. Part of the module Spanish, International and Sectorial Economics, and is taught in the third year of the degree, in the first half.

International Economics consists of two blocks of traditional economic analysis of relations between countries: trade and international finance. In the first block of microeconomic analysis tools will be used to study the effects of international trade, as have been approached by the various theories. In the second section the focus will be on analyzing, from a macroeconomic point of view, the main theories in order to explain the way the exchange rate of a country works.

International Economics thus has an important theoretical load, although issues applied to economic reality were also analyzed.

3. Requirements

In principle, the requirements are the corresponding for a third year course Grade: have successfully taken advantage of the previous studies of the two previous years. Particularly, International Economics is closely related to: World Economy, Economy of the European Union, and the subjects about micro and macroeconomics.

4. Competencies and learning results

Generic Skills

- CG1.- Capacity for analysis and synthesis
- CG2.- Learning capability
- CG3.- oral fluid capacity and written communication in the language
- CG5.- Ability to search and analysis of information sources in the workplace
- CG7.- Ability to work autonomously
- CG9.- Ability to work in a context of international
- CG10.- Critical capacity and self
- CG12.- Capacity for applying knowledge in practice
- CG20.- Concern for quality and a job well done
- CG21.- Having values and ethical behavior

Specific Skills

- ECO_CE3.- Identify and implement appropriate for the analysis of economic information quantitative tools
- ECO_CE4.- Understanding the institutional environment and its impact on economic activity
- ECO_CE5.- Understanding the behavior of economic agents and to assess its influence on the structure and functioning of markets
- ECO_CE6.- Understand how an economy works at the aggregate level and assess the impact of changes in agents' behavior or in the institutional framework
- ECO_CE8.- Understand and appreciate the international dimension of the economy
- ECO_CE9.- Understand and appreciate the interrelationships of economic agents
- ECO_CE10.- Analyze and evaluate economic policies
- ECO_CE13.- Understand the role of financial markets and asset valuation principles
- ECO_CE15.- transmit information, ideas, problems and solutions of the economic sphere to both specialist and non-specialist audience
- ECO_CE16.- Issue reports advice on specific situations (international, national or regional) economy or sectors of the same

Learning outcomes

- RA1: understand the main issues of International Economics

RA2: apply the basic concepts and methods of economics to understand the International Economy

RA3: learn to use the tools most appropriate economic analysis for International Economics

RA4: improve your ability to obtain and interpret for themselves the information and materials needed to understand the International Economy

RA8: improving its ability to transmit information and advice on matters of International Economics

RA9: assume the need to increase their autonomy to face the analysis of International Economics

5. Contents

Part I. International Trade

Chapter 1. The Ricardian model

1.1. The Ricardian model and comparative advantage

1.2. Extensions of the Ricardian model

Chapter 2. The standard trade model

2.1. Instruments for analysis and autarkic equilibrium

2.2. Exchange and welfare

Chapter 3. The Heckscher-Ohlin model

3.1. Choice of factors and goods prices

3.2. The Heckscher-Ohlin trade and effects

Chapter 4. New theories on international trade

4.1. Economies of Scale and International Trade

4.2. Imperfect competition and international trade

4.3. Company responses to trade

Chapter 5. Trade policy

5.1. The instruments of trade policy in competitive markets

5.2. Trade policy and monopoly

5.3. The political economy of trade policy

Part II. International Monetary Economics

Chapter 6. The foreign exchange market and exchange rates: an approach

- 6.1. The exchange rates and the foreign exchange market: The Basics
- 6.2. Interest rates and arbitration
- 6.3. Equilibrium in the foreign exchange market and its variations

Chapter 7. Monetary variables and exchange rates

- 7.1. The money supply and the exchange rates in the short term
- 7.2. The money and the price level in the short and long term
- 7.3. Inflation and the dynamics of exchange rates

Chapter 8. A general model of the types of long-term exchange rates

- 8.1. The purchasing power parity (PPP) and the monetary approach to the exchange rate
- 8.2. Empirical evidence on PPP
- 8.3. Towards a general model of the types of long-term exchange rates

References:

Basic:

KRUGMAN, P.R., OBSTFELD, M., MELITZ, M.J. (2012): International Economics. Theory and Policy, 9th edition. Pearson, Edinburgh.

Complementary:

FEENSTRA, R. C. and TAYLOR, AM (2011): International Trade. W.H. Freeman and Company, New York.

FEENSTRA, R. C. and TAYLOR, AM (2012): International Macroeconomics. Worth Publishers, New York.

Bibliographic Guide for detailed chapters:

| | | |
|---------|-------|---------------|
| Chapter | Basic | Complementary |
|---------|-------|---------------|

| | | |
|---|----------------------|---------------------------|
| 1 | KOM Chapter 3 | FT (2011) Chapter 2 |
| 2 | KOM Chapter 6 | FT (2011) Chapter 4 |
| 3 | KOM Chapter 5 | FT (2011) Chapter 4 |
| 4 | KOM Chapter 7 and 8 | FT (2011) Chapter 6 and 7 |
| 5 | KOM Chapter 9 and 10 | FT (2011) Chapter 8 and 9 |
| 6 | KOM Chapter 14 | FT (2012) Chapter 2 |
| 7 | KOM Chapter 15 | FT (2012) Chapter 4 |
| 8 | KOM Chapter 16 | FT (2012) Chapter 3 |

Note: KOM refers to manual Krugman, Obstfeld and Melitz, and FT to manuals Feenstra and Taylor.

6. Methodology and working plan

Class work:

- Lectures. The teacher will interactively conceptual content related to each agenda item. For this purpose, it shall provide to the students about transparencies that will be essential to monitor the lectures.
- Classroom Practices. These classes are aimed at students and teacher interaction for reprocessing concepts. These classes are intended primarily for modeling by the teacher, and the subsequent practice of the students of economic reasoning, argumentation and reasoned critical analysis, and the use of economic language and technical vocabulary for International Economics.
- Group Tutoring: group tutoring sessions will be mainly engaged in the cooperative resolution (between teacher and students and among students) of questions related to the development of the subject, whether individual or collective. May also carry out continuous assessment tests.
- Assessment sessions: students will demonstrate their knowledge in ongoing evaluation sessions (which can be done in lectures in classroom practices or group tutorials) and a final exam.

Non-contact work:

In the non-contact tasks students have to perform to good tracking for International Economics include individual work and self-study, and will include:

- Previous reading of the slides provided by the teacher to follow the lectures
- Doing exercises and analysis of case studies

- Reading and analysis of texts
- Personal study and preparation of assessment tests

7. Evaluation of the student's learning results

The evaluation of International Economics Course is based on :

- The continuous evaluation, which can not be recovered in exams or in the ordinary and the extraordinary
- The final exam, to be held on the date fixed by the center

The continuous assessment activities are organized as follows:

- There will be various monitoring tests and tasks proposed by the teacher, carried out over the period of the course teacher, made or raised in the lectures, practical or group tutorials. Weight in: 40%.
- All follow-up tests and assignments will be weighted in the final grade lower than 10%. As a guide, the number of tests and assignments can be five with a maximum score of 0.8 points each.

In the final exam all matter of the course is evaluated through both theoretical and practical issues, which may take the form of tests, exercises, etc. Follow-up tests of continuous assessment not release matter, that is, in examining all the contents of all issues are evaluated.

The final grade in all calls will be the sum of the marks obtained in continuous assessment and final examination. The continuous assessment tests will not be repeated in the extraordinary calls, but your score will be kept in these calls.

In the event that there are students in the form of differentiated assessment, the final exam will include a test equivalent to 40% of the continuous assessment.

8. Resources, bibliography and complementary documentation

Basic:

KRUGMAN, P.R., OBSTFELD, M., MELITZ, M.J. (2012): International Economics. Theory and Policy, 9th edition. Pearson, Edinburgh.

Complementary:

FEENSTRA, R. C. and TAYLOR, AM (2011): International Trade. W.H. Freeman and Company, New York.

FEENSTRA, R. C. and TAYLOR, AM (2012): International Macroeconomics. Worth Publishers, New York.

Subject Guide

1. Information about the subject

| | | | | |
|--------------------------------|--|-------------------------|--|----------------|
| SUBJECT | Economía Pública I | | CODE | GECONO01-3-004 |
| EDUCATIONAL OFFER | Graduado o Graduada en Economía Degree in Economics | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria | N° TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano | |
| COORDINATORS/ES | | EMAIL | | |
| MUÑIZ PEREZ MANUEL ANTONIO | | manumuni@uniovi.es | | |
| BLANCO ANGEL FRANCISCO ANTONIO | | fblanco@uniovi.es | | |
| LECTURERS | | EMAIL | | |
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| BLANCO ANGEL FRANCISCO ANTONIO | | fblanco@uniovi.es | | |

2. Context

Course overview

The goal of Public Economics courses is to study the rationality of public programs in the economy and their consequences. This concrete course is focused on the foundations of public interventions in the Economy, the public sector behavior and the analysis of public expenditure programs. Thus, we will analyze the general principles to manage the public sector (equity and efficiency), the different theories about the growth of public spending and the techniques to measure its effects. Particularly, we will study the major programs of public expenditures in Welfare State, such as public pensions, health, education and housing. Furthermore, theories of public choice, throughout the mechanisms of revealing and adding individual preferences and some positive models of behavior in the Public Sector will be also analyzed

The contents of this course will be complemented in further semesters with the courses of *Public Economics II* and *Evaluation of Public Policies*. In those courses, public revenue sources and the application of theoretical knowledge to the empirical analysis of public policies will be respectively studied.

3. Requirements

Prerequisites

Although there are no prerequisites, it is highly advisable to have some basic abilities on microeconomics and statistics. In particular, it is recommendable that students get by welfare economics, probabilities and some techniques to evaluate distribution. Additionally, they might be used to operate on E-Campus.

4. Competencies and learning results

Competences and learning outcomes

By the end of this course, students are expected to be able to:

Theory learning outcomes: Analyze the foundations of public policies' funding instruments and its effects on economic agents' behavior.

Practice learning outcomes: Apply economic analysis tools in the context of public economics, solving real problems related to public management.

Moreover, this course aims to work on the following competences:

Generic competences

Instrumental competences

- Analysis and synthesis ability
- Basic general knowledge
- Ability to search and analyze information from alternative sources

Interpersonal competences

- Critical and self-critical ability
- Ability to work in teams

Other competences

- Ability to put knowledge into practice.
- Ability to learn
- Ability to adapt to new situations
- Ability to work independently

Specific competences

- Ability to understand the institutional framework and its impact on the economic activity.
- Ability to understand the behavior of economic agents and to value its influence on the structure and performance of the markets.
- Ability to know and value the rol of the public sector in the Economy.

5. Contents**General program**

I. FOUNDATIONS

TOPIC 1: Public Finance and Public Sector

TOPIC 2: The Budget in the Public Sector

TOPIC 3: The Reasons for Public Interventions: Market Failures

TOPIC 4: Public Choice and Public Sector Behavior

II. PUBLIC EXPENDITURE

TOPIC 5: Design and Evaluation of Public Expenditure Programs

TOPIC 6: Efficiency and Equity of Public Expenditure

TOPIC 7: Cost-Benefit Analysis

TOPIC 8: Public Expenditure in Welfare State (I): Social Expenditures

TOPIC 9: Public Expenditure in Welfare State (II): Economic Benefits

Detailed program and specific learning outcomes

TOPIC 1: PUBLIC FINANCE AND PUBLIC SECTOR

Contents:

- Main objectives
- Analytical focus: Positive versus Normative Theories
- Public Sector Activities
- The Size of the Public Sector: Measurement Indexes

Specific learning outcomes:

- Have a scope of the content and main objectives of Public Economics as autonomous topic in Economic Science. Understand some basic concepts which will be continuously used during the whole course.

TOPIC 2: THE BUDGET IN THE PUBLIC SECTOR

Contents:

- Concept, principles and budgetary process
- Budget Classifications
- Budget and the Economy: Budgetary Policy Indicators
- Budgetary Stability in Spain and the European Union

Specific learning outcomes:

- Know the main concepts linked to public budgets, as the core of public policies. Manage and understand the statistics about the Public Sector and be familiar with the programs of public income and spending.

TOPIC 3: THE REASONS FOR PUBLIC INTERVENTIONS: MARKET FAILURES

Contents:

- Welfare State and Economic Efficiency
- Interventions to Reach Efficiency: Market Failures
- Interventions to Reach Equity: Income Redistribution

Specific learning outcomes:

- Understand the theoretical aspects relative to the efficiency and equity justifying the public sector in market Economies.

TOPIC 4: PUBLIC CHOICE AND PUBLIC SECTOR BEHAVIOR

Contents:

- Public Choice mechanisms. Theory of Voting
- Models of Public Sector Behavior. Theory of Democracy

Specific learning outcomes:

- Understand the process of aggregating the individual preferences for adopting collective decisions and be able to identify certain public sector failures.

TOPIC 5: DESIGN AND EVALUATION OF PUBLIC EXPENDITURE PROGRAMS

Contents:

- Market Failures and Programs of Expenditure
- Private Sector Responses to Public Programs
- Distributive Consequences
- Political Market and the Real Implementation of Expenditure Programs

Specific learning outcomes:

- Understand the relationships between public decisions and private agents reactions both, from theoretical and institutional views.

TOPIC 6: EFFICIENCY AND EQUITY OF PUBLIC EXPENDITURE

Contents:

- Theories about the Growth of Public Spending
- The Efficiency of Public Expenditure
- Incidence and Redistributive Effects of Public Expenditure

Specific learning outcomes:

- Know the principal theoretical and empirical explanations about the reasons of the increasing of public expenditures in market Economies and introducing some techniques devoted to the measurement of efficiency and equity in the public sector.

TOPIC 7: COST-BENEFIT ANALYSIS

Contents:

- CBA as General Framework
- Criteria for Adopting Decisions
- CBA in the Public Sector

Specific learning outcomes:

- Understand the main characteristics of this important instrument for adopting investment decisions

TOPIC 8: PUBLIC EXPENDITURE IN WELFARE STATE (I): SOCIAL EXPENDITURES

Contents:

- Merit Goods and Categorical Equity
- Public Spending in Health
- Public Spending in Education
- Public Spending in Housing

Specific learning outcomes:

- Assess the economic impact of the main programs of social expenditures both, from the view of efficiency and equity

TOPIC 9: PUBLIC EXPENDITURE IN WELFARE STATE (II): ECONOMIC BENEFITS**Contents:**

- Introduction to the Programs of Income Substitution
- Retirement Pensions and Unemployment Subsidies
- Programs for Reducing Poverty

Specific learning outcomes:

- Assess the economic impact of the main programs of economic benefits both, from the view of efficiency and equity

6. Methodology and working plan**Teaching methodology and planning**

This course will be based on both required and non required attendance activities. The former activities include lectures to present the theoretical contents of each topic by means of Power-point slides shows. In addition, weekly practices/seminars are proposed in order to solve exercises related to the theoretical background and to discuss real-world cases. E-campus will be the main tool and platform for students' work and assessment. So students could download several course materials and

they also will be able to upload their weekly work and practices. This tool also allows for discussion and evaluation.

The number of hours dedicated to different activities per topic is presented in the following table:

| | | WORK REQUIRING ATTENDANCE | | | | | | WORK NOT REQUIRING ATTENDANCE | | |
|---------------|------------------------|---------------------------------|---------------------------------------|----------------------------|--------------------------------|---------------|--------------|----------------------------------|----------------------------|--------------|
| TOPICS | Total hours | <i>Lectures</i> | <i>Practices and seminars</i> | <i>Group tutorials</i> | <i>Evalutaion Sessions</i> | <i>Visits</i> | Total | <i>Work team</i> | <i>Individual work</i> | Total |
| TOPIC 1 | 13 | 2 | 2 | | | | 4 | | 10 | 10 |
| TOPIC 2 | 13 | 2 | 2 | | | | 4 | | 10 | 10 |
| TOPIC 3 | 13 | 2 | 2 | | | | 4 | | 10 | 10 |
| TOPIC 4 | 13 | 2 | 2 | | | | 4 | | 10 | 10 |
| TOPIC 5 | 13 | 2 | 2 | | | | 4 | | 10 | 10 |
| TOPIC 6 | 13 | 2 | 2 | | | | 4 | | 10 | 10 |
| TOPIC 7 | 13 | 2 | 2 | | | | 4 | | 10 | 10 |
| TOPIC 8 | 13 | 2 | 2 | | | | 4 | | 10 | 10 |

| | | | | | | | | | | |
|--------------------|------------|-----------|-----------|----------|----------|----------|-----------|----------|-----------|-----------|
| TOPIC 9 | 13 | 2 | 2 | | | | 4 | | 10 | 10 |
| All Topics | 30 | 4 | 2 | 4 | 4 | | 14 | 7 | | 7 |
| Other Activities | 3 | | | | | 3 | 3 | | | |
| Total hours | 150 | 22 | 20 | 4 | 4 | 3 | 53 | 7 | 90 | 97 |
| % | 100 | 14 | 13 | 3 | 3 | 2 | 35 | 5 | 60 | 65 |

7. Evaluation of the student's learning results

Assessment/Evaluation procedure

Final grades for this course will be based on both final exam (with theoretical questions and concrete problems) and continuous assessment (practices and monitoring tests). So final mark will be the sum of the points obtained in continuous assessment and the final exam, where continuous assessment accounts for 40% of the final grade (20 % of it from practices and the remaining 80% from monitoring tests) and the final exam 60%. Positive evaluation of a minimum of 40% of practices/monitoring tests is compulsory to be eligible for controlled assessment. The monitoring tests and practices cannot be repeated neither retaken. To obtain the maximum mark (10), students might get a positive evaluation in all the continuous assessment tests/practices, jointly with the maximum grade in the final exam. Points obtained from continuous assessment will be maintained at the three examinations. Finally, no continuous assessment will be considered for part-time students who have the right to an alternative evaluation system, so their final mark will be based exclusively on final exam results which account for 100% of the final grade.

Summary table

| Assessment | Weight in the final grade (%) |
|------------------------------|----------------------------------|
| Continuous/controlled | 40 % |

| | |
|--|------|
| Maximum mark: 4 Evaluation of weekly practices / monitoring test Minimum requirements: Positive evaluation of a minimum 40% of the proposed activities | |
| Final exam Maximum mark: 6 Compulsory: Yes | 60 % |

8. Resources, bibliography and complementary documentation

Resources and bibliography

References:

- ALBI IBÁÑEZ, Emilio; ZUBIRI ORIA, Ignacio and GONZÁLEZ-PÁRAMO, José Manuel (2009): *Economía Pública II*, Barcelona, Ariel, 3rd edition.
- GAYER, Ted and ROSEN, Harvey (2009): *Public Finance*, 9th Edition, London McGraw Hill.
- MUSGRAVE, Richard and MUSGRAVE, Peggy (1989): *Public Finance in Theory and Practice*, 5th Edition, London, Mc Graw-Hill.
- RUIZ-HUERTA CARBONELL, Jesús and LOSCOS FERNÁNDEZ, Javier (dirs.) (2003): *Ejercicios de Hacienda Pública*, Madrid, McGraw Hill.
- STIGLITZ, Joseph E. (2002): *Economics of the Public Sector*, 3rd edition, New York, W. W. Norton & Company.

Recommended websites:

- www.minhap.gob.es
- www.ief.es
- www.oecd.org
- www.imf.org
- www.ine.es

- www.agenciatributaria.es
- www.bde.es
- ec.europa.eu/eurostat

Complementary materials will be provided during the semester

Subject Guide

1. Information about the subject

| | | | | |
|-------------------------------------|--|-------------------------|--|----------------|
| SUBJECT | Economía Pública II | | CODE | GECONO01-3-005 |
| EDUCATIONAL OFFER | Graduado o Graduada en Economía Degree in Economics | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | N° TOTAL CREDITS | 6.0 | |
| PERIOD | Second Semester | LANGUAGE | Castellano English | |
| COORDINATORS/ES | | EMAIL | | |
| MONASTERIO ESCUDERO CARLOS AURELIO | | | | |
| LECTURERS | | EMAIL | | |
| GARCIA VALIÑAS MARIA DE LOS ANGELES | | mariangv@uniovi.es | | |
| MONASTERIO ESCUDERO CARLOS AURELIO | | | | |

2. Context

This course is part of a broad module on *Public Sector Economics*. Additionally is also a course related to the subject *Public Economics*. The goal of Public Economics courses is to study the rationality of public programs in the economy and their consequences. This course is the continuation of Public Economics I, which is focused on the causes of public sector behavior and the analysis of public expenditure programs. Due to the necessity to get funds and resources to finance public expenditures, Public Economics II course overviews the most important revenue sources/instruments used by the public sector. Emphasis is placed on the foundations of optimal tax systems and the main direct and indirect taxes. The contents of this course provide students some useful theoretical instruments to take the course Spanish Public Sector, which explores the Spanish tax system.

3. Requirements

Although there are no prerequisites, it is highly advisable to have some basic abilities on microeconomics and statistics. In particular, it is recommendable that students get by welfare economics, probabilities and some techniques to evaluate distribution. Additionally, they might be used to operate on E-Campus.

4. Competencies and learning results

By the end of this course, students are expected to be able to:

Theory learning outcomes: Analyze the foundations of public policies' funding instruments and its effects on economic agents' behavior.

Practice learning outcomes: Apply economic analysis tools in the context of public economics, solving real problems related to public management.

Moreover, this course aims to work on the following competences:

a) Generic competences

Instrumental competences

- Analysis and synthesis ability
- Basic general knowledge
- Ability to search and analyze information from alternative sources

Interpersonal competences

- Critical and self-critical ability
- Ability to work in teams

Other competences

- Ability to put knowledge into practice.
- Ability to learn
- Ability to adapt to new situations
- Ability to work independently

b) Specific competences

- Ability to understand and manage with some basic concepts on taxation.
- Ability to analyze the economic effects of taxation from both efficient and equity point of view.
- Ability to evaluate the economic impact of funding instruments on markets and economic agents' incentives.

5. Contents

5.1.- General program

I. FOUNDATIONS OF TAX THEORY

TOPIC 1: Public revenues and taxes

TOPIC 2: Optimal taxation: Efficiency and equity

TOPIC 3: Tax incidence

II. TAX SYSTEM DESIGN

TOPIC 4: Personal income tax

TOPIC 5: Corporation tax

TOPIC 6: The effects of taxes on individual behavior

TOPIC 7: Indirect taxation

TOPIC 8: The taxation of wealth

III. OTHER TOPICS ON PUBLIC ECONOMICS

TOPIC 9: Other revenues

TOPIC 10: Fiscal federalism

5.2.- Detailed program and specific learning outcomes

TOPIC 1: PUBLIC REVENUES AND TAXES

Contents:

- Classifications of public revenues
- Definition and elements of taxes
- Types of taxes
- Benefit and ability-to-pay principles
- Tax progressivity

Specific learning outcomes:

- Understand some basic concepts which will be continuously used during the whole course. In general, students might become familiar with taxation terminology and in particular with progressivity.

TOPIC 2: OPTIMAL TAXATION: EFFICIENCY AND EQUITY

Contents:

- The excess burden of taxation
- Optimal taxation: efficiency

- Optimal taxation: equity
- Optimal taxation: tax administration

Specific learning outcomes:

- Place the effects of taxation policies in the context of microeconomics and welfare economics foundations. In particular the students might understand and calculate the excess burden of taxation and also know the optimal taxation rules.

TOPIC 3: TAX INCIDENCE

Contents:

- Types of incidence
- Partial equilibrium tax incidence
- General equilibrium tax incidence
- Spatial incidence
- Tax incidence in a life-cycle framework
- Empirical evidence

Specific learning outcomes:

- Analyze the distributive effects of taxation in a market economy context. In particular, students might understand and apply the models to evaluate the tax burden translation.

TOPIC 4: PERSONAL INCOME TAX

Contents:

- Justification
- The personal income tax structure
- Taxable income
- The choice of taxable unit
- Personal income tax progressivity
- The effects of inflation on personal income tax
- The reform of personal income tax in Spain

Specific learning outcomes:

- Understand some problems in the design of personal income tax as the mainstay of modern tax systems. In particular, students might discuss and criticize different options to reform personal income tax, placing special emphasis on the Spanish case.

TOPIC 5: CORPORATION TAX

Contents:

- Justification
- Corporation tax structure
- Corporation tax and firm decisions
- Inflation and corporation tax
- Integration of corporate and personal income taxes

Specific learning outcomes:

- Place the corporation tax into the modern tax systems. In particular students might know the elements and effects of corporation tax, and also to assess the feasibility of its integration with the personal income tax.

TOPIC 6: THE EFFECTS OF TAXES ON INDIVIDUAL BEHAVIOR

Contents:

- Taxation and labour supply
- Taxation and saving
- Taxation and risk-taking
- Tax avoidance and tax evasion

Specific learning outcomes:

- Extend and reinforce the learning outcomes from topics 2 and 3. In particular, students might know how taxes provide incentives to change individuals' behavior, both from a theoretical and applied point of view.

TOPIC 7: INDIRECT TAXATION

Contents:

- Justification
- Classification of indirect taxes
- Excises and other selective sales taxes
- General sales taxes
- European value added tax (VAT): characteristics and harmonization

Specific learning outcomes:

- Assess the characteristics, structures and economic effect of several indirect taxes. Special attention will be place on the European VAT.

TOPIC 8: THE TAXATION OF WEALTH

Contents:

- Justification
- Types of wealth taxes
- Economic effects
- Capitalization of property taxes

Specific learning outcomes:

- Analyze the taxation of wealth as an ability-to-pay index. In particular, students might compare different alternatives, their structure and their economic impact.

TOPIC 9: OTHER REVENUES

Contents:

- Public prices and fees
- Money emission
- Public sector indebtedness
- Budgetary Stability and Financial Sustainability
- Privatizations

Specific learning outcomes:

- Analyze alternative public revenue sources different from taxes. In particular, students might identify and discuss the main problems of public services pricing, the effects of money emission on inflation, the macroeconomic problems linked to public indebtedness and the economic impact of public enterprises privatization.

TOPIC 10: FISCAL FEDERALISM

Contents:

- Basic theory of fiscal federalism
- The assignment of functions
- Tax assignment
- Intergovernmental grants
- International public economics

Specific learning outcomes:

- Extend the public economics overview towards the intergovernmental coordination.

6. Methodology and working plan

This course will be based on both required and non required attendance activities. The former activities include lectures to present the theoretical contents of each topic by means of Power-point slides shows. In addition, weekly practices/seminars are proposed in order to solve exercises related to the theoretical background and to discuss real-world cases. E-campus will be the main tool and platform for students' work and assessment. So students could download several course materials and they also will be able to upload their weekly work and practices. This tool also allows for discussion and evaluation.

7. Evaluation of the student's learning results

Final grades for this course will be based on both final exam (with theoretical and practical questions) and continuous assessment (practices and monitoring tests). A minimum mark will be required on both theoretical and practical sections of the final exam (3.5 over 10, or equivalent scale). So final mark will be the sum of the points obtained in continuous assessment and the final exam, where continuous evaluation accounts for 40% of the final grade and the final exam 60%. Positive evaluation of a minimum of 40% of practices/monitoring tests is compulsory to be eligible for controlled assessment. The monitoring tests and practices cannot be repeated neither retaken. To obtain the maximum mark (10), students might get a positive evaluation in all the continuous assessment tests/practices, jointly with the maximum grade in the final exam. Points obtained from continuous assessment will be maintained at the three examinations. Finally, no continuous assessment will be considered for part-time students who have the right to an alternative evaluation system, so their final mark will be based exclusively on final exam results which account for 100% of the final grade.

8. Resources, bibliography and complementary documentation

References:

- ALBI IBÁÑEZ, Emilio; ZUBIRI ORIA, Ignacio y, GONZÁLEZ-PÁRAMO, José Manuel (2009): Economía Pública II, Barcelona, Ariel, 3ª edición actualizada.
- GAYER, Ted and ROSEN, Harvey (2009): Public Finance, 9th Edition, London McGraw Hill.
- MUSGRAVE, Richard and MUSGRAVE, Peggy (1989): Public Finance in Theory and Practice, 5th Edition, London, Mc Graw-Hill.
- RUIZ-HUERTA CARBONELL, Jesús y LOSCOS FERNÁNDEZ, Javier (dirs.) (2003): Ejercicios de Hacienda Pública, Madrid, McGraw Hill.
- STIGLITZ, Joseph E. (2002): Economics of the Public Sector, 3rd edition, New York, W. W. Norton & Company.

Recommended websites:

- www.minhap.gob.es
- www.ief.es
- [www. www.agenciatributaria.es](http://www.agenciatributaria.es)
- www.ine.es
- www.bde.es
- ec.europa.eu/eurostat

Complementary materials will be provided during the semester

“

1. Course description

| | | | | |
|----------------------|--------------------------|--|----------------------------------|----------------|
| NAME | Organizational Economics | | CODE | GECONO01-3-002 |
| DEGREE | Degree in Economics | SCHOOL | School of Economics and Business | |
| TYPE | Compulsory | TOTAL # OF CREDITS (ECTS) | 6 | |
| SEMESTER | Semester 1 | LANGUAGE | English | |
| COORDINATOR | | PHONE / E-MAIL | OFFICE | |
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2. Course overview and background

Organizational Economics is a compulsory subject in the Business Organization Module within the field of Business Fundamentals. This course aims, firstly, to highlight the importance of the business world in the economy and, secondly, to teach students the fundamentals of its internal organization and functioning. Companies constitute the productive sector of an economy and determine its productivity, efficiency and value added. It is then need to improve companies performance to enhance also the Economy. To reach this aim, this subject proposes to study the economic nature of the firm. Economists should be aware of this area of expertise and the subject tries to fill this need in the graduate training, offering a series of theoretical tools for understanding business problems.

3. Course prerequisites

Basic notions of Business Administration are required; the ones that are typically taught in the “Introduction to Business” subject.

4. Competences and learning outcomes

The aim of this course is to show students how to use a set of economic analysis tools to facilitate the study and comparison of different solutions (organizations).. By the end of the course it is intended that students will have improved their ability to analyze business relationships and will be able to identify the sources of problems and will propose possible solutions to them.

a) General competences:

- Basic knowledge about business organization economic analysis.
- Analysis and synthesis skills.
- Ability to apply theoretical knowledge to practice.
- Ability to work autonomously.
- Skills at searching for and analyzing information in the working environment.
- Decision-making.
- Team-working skills.
- Criticism and self-criticism skills.
- Knowledge and understanding of other languages, mainly English.
- Ability to organize and plan.

b) Specific competences:

- To understand and assess the economic agents' relations.
- To understand the economic agents' behavior and to assess their influence in the structure and operations of markets and organizations.
- To identify and analyze the determinants of coordination and motivation problems in firms, under different institutional environments (social and judicial) and proposing efficient organizational forms.
- To search information within the organization to identify problems and to design solutions: coordination devices and incentive systems.
- To transmit information, ideas, problems and solutions (even consulting reports) about organizations and markets to either specialized or non-specialized audience.

c) Learning outcomes:

- Ability to identify and categorize coordination and motivation problems between and within organizations.
- Ability to propose efficient solutions to coordination and motivation problems.
- Ability to control and to assess the performance of different solutions.

5. Contents

5.1. Summary of contents

PART I: CONCEPTUAL FRAMEWORK

LESSON 1.- The problem of organizational economics: markets and organizations

- LESSON 2.- Transaction costs
- LESSON 3.- Coordination mechanisms
- LESSON 4.- Safeguard mechanisms I
- LESSON 5.- Safeguard mechanisms II

PART II: THE ORGANIZATIONAL ARCHITECTURE

- LESSON 6.- Organizational design and control
- LESSON 7.- Organizational design
- LESSON 8.- Compensation
- LESSON 9.- Evaluation

5.2. Detailed contents and learning objectives

PART I: CONCEPTUAL FRAMEWORK

LESSON 1.- The problem of organizational economics: markets and organizations

- 1.1. Specialization, exchanges and coordination mechanisms
- 1.2. The price mechanism
- 1.3. Transaction costs and the nature of the firm
- 1.4. Market failures and the Coase's Theorem

Readings:

- Brickley, Smith and Zimmerman 2004, chapter 3
- Milgrom and Roberts 1992, chapters 2 and 3

By the end of this lesson, the student should understand why firms exist and why transaction costs are a central element in finding efficient solutions to organizational problems.

LESSON 2.- Transaction costs

- 2.1. Information, specific knowledge and opportunism
- 2.2. Transaction costs analysis
- 2.3. Classification of transaction costs.
- 2.4. Agency model

Readings:

- Brickley, Smith and Zimmerman 2004, chapter 10.
- Milgrom and Roberts 1992, chapters 2, 5 and 6.

By the end of this lesson, the student should be able to differentiate among informational problems, to identify the sources of transaction costs and to analyze transaction key dimensions.

LESSON 3.- Coordination mechanisms

- 3.1. The contract
- 3.2. Parties completion
- 3.3. Institutional completion
- 3.4. Coordination mechanisms in organizations

Readings:

- Milgrom and Roberts 1992, chapter 4

By the end of this lesson, the student should be able to understand the role of contracts both in the market and within organizations and how contracts can be completed through parties' agreements and the institutional definition.

LESSON 4.- Safeguard mechanisms I

- 4.1. Contractual safeguards
- 4.2. Bargaining costs
- 4.3. Rent seeking safeguards
- 4.4. Adverse selection safeguards

Readings:

- Milgrom and Roberts 1992, chapter 5.

By the end of this lesson, the student should be able to identify different solutions to ex ante informational problems.

LESSON 5.- Safeguard mechanisms II

- 5.1. Controlling moral hazard
- 5.2. Ownership as a safeguard
- 5.3. Other implicit safeguards
- 5.4. The hold-up problem

Readings:

Milgrom and Roberts 1993, chapters 6, 7, 8 and 9

By the end of this lesson, the student should be able to identify different solutions to ex post informational problems.

PART II: THE ORGANIZATIONAL ARCHITECTURE**LESSON 6.- Organizational design and control**

- 6.1. The fundamental problem: information and conflicts
- 6.2. Architecture of markets vs architecture of firms
- 6.3. Architectural determinants
- 6.4. Changing the architecture

Readings:

- Brickley, Smith and Zimmerman 2004, chapter 11

By the end of this lesson, the student should be able to understand the interactions between strategy and structure and how the three components of organizational architecture helps to analyze organizational problems systematically.

LESSON 7.- Organizational design

- 7.1. Introduction
- 7.2. Delegation
- 7.3. Bundling task into jobs and subunits

Readings:

- Brickley, Smith y Zimmerman 2004, chapter 12 and 13.

By the end of this lesson, the student should be able to understand and to assess the cost of decentralization and specialization. Similarly, students should also be able to assess when teams are appropriate for decision making and to bundle jobs into subunits.

LESSON 8.- Compensation

- 8.1. The level of pay
- 8.2. The salary-fringe benefits mix
- 8.3. Incentive compensation

Readings:

Brickley, Smith and Zimmerman 2004, chapters 14 and 15.

By the end of this lesson, the student should be able to assess different compensation systems and to propose the most appropriate, given the characteristics of each job.

LESSON 9.- Evaluation

- 9.1. Individual performance evaluation
- 9.2. Divisional performance evaluation

Readings:

- Brickley, Smith and Zimmerman 2004, chapters 16 and 17.

By the end of this lesson, the student should be able to assess different evaluation systems and to propose the most appropriate, given the characteristics of each job.

6. Methodology and working plan

Theoretical sessions. Sessions aimed at introducing and developing the key ideas and concepts of each topic. They involve a presentation by the lecturer who could use audio–visual support, but students are also encouraged to actively participate with their opinions to class discussion. A basic bibliography will be available for students in order to help following and understanding these lectures. Besides, additional material will be available on-line at the university's e-Campus.

Practice-based sessions. They are aimed at developing practical contents related to each topic, as well as to expand the contents presented in the Theoretical sessions. They involve interaction between the teacher and the students. Students are expected to discuss issues and cases (Exercise book), and critically formulate their own arguments. Assignments will be scheduled beforehand, and students are expected to prepare them before each session. They are related to:

- Case analysis.
- Review questions or exercises.

At the beginning of each session, students could be required to individually write and deliver to the professor the solution to a specific question formulated by him/her at that time.

All the material and information of the assignments scheduled for each session will be available on-line at e-Campus.

Depending on the quality of the student's participations in the session discussions and the writing reports delivered to the professor to the questions formulated in the class, as well as the participation in the theoretical sessions, each student can get up to 1 point out of the four points of the continuous assessment.

Group tutorial sessions. They are focused on teamwork. The aim of this type of sessions is to develop decision-making and team-working skills. Students will split in small groups (group size will be announced in the first of these sessions). Each group must choose a case/problem from the "Team-resolution exercises list". They have to solve it on their own and then to present and discuss with the professor in different tutorial sessions. They have also to present the solution to their classmates. Each student can get up to 1'5 point for these teamwork activities. Members of each group can be valued differently depending on the quality of their individual contribution to the group, the quality of their presentations and the answers to the questions formulated by the professor in the different group tutorials

The following table presents the hourly breakdown of these different types of sessions/work.

| <i>Lessons</i> | <i>Total hours</i> | PRESENIAL WORK | | | | | | | | NON-PRESENIAL WORK | | |
|---|--------------------|-----------------------------|--------------------------------|--|---------------------------|--------------------------------|-----------------------------|----------------------------|--------------|---------------------------|------------------------|--------------|
| | | <i>Theoretical sessions</i> | <i>Practice-based sessions</i> | <i>Computer lab classes / Field practice</i> | <i>Hospital practices</i> | <i>Group tutorial sessions</i> | <i>External internships</i> | <i>Evaluation sessions</i> | <i>Total</i> | <i>Team Work</i> | <i>Autonomous work</i> | <i>Total</i> |
| L1.The problem of organizational economics: markets and organizations | 11 | 3 | 3 | | | | | | 6 | | 5 | 5 |
| L2.- Transaction costs | 16 | 3 | 3 | | | | | | 6 | | 10 | 10 |
| L3.- Coordination mechanisms | 15 | 3 | 2 | | | | | | 5 | | 10 | 10 |
| L4.- Safeguard mechanisms I | 23 | 5 | 3 | | | | | | 8 | | 15 | 15 |
| L5.- Safeguard mechanisms II | 23 | 5 | 3 | | | | | | 8 | | 15 | 15 |
| L6.- Organizational design and control | 2 | 1 | 0 | | | | | | 1 | | 1 | 1 |
| L7.- Organizational design | 6 | 2 | 1 | | | | | | 3 | | 3 | 3 |
| L8.- Compensation | 14 | 3 | 3 | | | | | | 6 | | 8 | 8 |
| L9.- Evaluation | 14 | 3 | 3 | | | | | | 6 | | 8 | 8 |
| Organizational problem assignment (teamwork) | 24 | | | | | 4 | | | 4 | 20 | | 20 |
| Final exam | 2 | | | | | | | 2 | 2 | | | |
| Total | 150 | 28 | 21 | | | 4 | | 2 | 55 | 20 | 75 | 95 |

The following table presents the above information expressed in percentages.

| TYPE | | Hours | % | Total |
|-------------------|---------------------------------------|-------|-------|-------|
| In-class | Lectures | 28 | 18.67 | 36.67 |
| | Practice-based sessions | 21 | 14 | |
| | Computer lab classes / Field practice | 0 | 0 | |
| | Group tutorial sessions | 4 | 2.67 | |
| | External internships | 0 | 0 | |
| | Evaluation sessions | 2 | 1.33 | |
| Out-of-class work | Team work | 20 | 13.33 | 63.33 |
| | Individual work | 75 | 50 | |
| | Total | 150 | | |

An hourly schedule of theory, practice-based and group tutorial sessions is presented in the table below. However, this schedule is intended to be flexible and may be modified in order to adapt to the calendar of each group, as well as to introduce any new activity that may be of interest for the course development, as well as to promote the students commitment and particular interest regarding the different topics covered during the course.

| Week | Type of Activity | Content | Duration |
|------|------------------|---|----------|
| 1 | Theory | Theory: Lesson 1 | 3 h. |
| 2 | Theory | Theory: Lesson 2 | 1.5 h. |
| | Practice | Practice 1 | 1.5 h. |
| | Group tutorials | Group formation, assignments and instructions | 1 h. |
| 3 | Theory | Theory: Lesson 2 | 1.5 h. |
| | Practice | Practice 1 | 1.5 h. |
| 4 | Theory | Theory: Lesson 3 | 1.5 h. |
| | Practice | Practice 2 | 1.5 h. |
| 5 | Theory | Theory: Lesson 3 | 1.5 h. |
| | Practice | Practice 2 and 3 | 1.5 h. |
| | Group tutorials | Discussion of drafts | 1 h. |
| 6 | Theory | Theory: Lesson 4 | 1.5 h. |
| | Practice | Practice 3 | 1.5 h. |
| 7 | Theory | Theory: Lesson 4 | 1.5 h. |
| | Practice | Practice 4 | 1.5 h. |

| | | | |
|----|---------------------------------------|---|--------------------------|
| 8 | Theory Practice | Theory: Lesson 4 and 5 Practice 4 | 1.5 h. 1.5 h. |
| 9 | Theory Practice | Theory: Lesson 5 Practice 5 | 1.5 h. 1.5 h. |
| 10 | Theory Practice Group tutorials | Theory: Lesson 5 Practice 5 Discussion of drafts | 1.5 h. 1.5 h. 1 h. |
| 11 | Theory Practice | Theory: Lesson 5 and 6 Practice 6 | 1.5 h. 1.5 h. |
| 12 | Theory Practice | Theory: Lesson 7 Practice 7 | 1.5 h. 1.5 h. |
| 13 | Theory Practice Group tutorials | Theory: Lesson 8 Practice 8 Final report presentation | 1.5 h. 1.5 h. 1 h. |
| 14 | Theory Practice | Theory: Lesson 9 Practice 9 | 1.5 h. 1.5 h. |

7. Assessment

Students will be assessed through the following criteria: a) continuous (controlled) assessment, and b) final exam.

Continuous assessment. Up to four points (40% of the final grade), distributed in the following way:

- Periodical assessment tests (exercises, class- participations, small case resolution), all equally valued, which will be conducted either in practical sessions (oral or written) or through the virtual campus. Up to 1 point.
- Team assignment (presentations in the second, third and fourth group tutorial sessions). Up to 1.5 points. Members of each group can be valued differently depending on *i)* the quality of their individual contribution to the group, *ii)* the quality of their presentations and *iii)* the answers to the questions formulated by the professor in the different group tutorials. Only the members of the group attending the presentation will be evaluated. Each group must include a statement in their report regarding the individual contribution of each member for each session. It will be assessed for the team mark: *i)* quality and fit of the presented solutions, *ii)* competence in applying the theory to the case, *iii)* oral skills for communicating the solution and defending its content.
- Individual assignment. Up to 1.5 points. The professor will present the assignment and students should solve it individually. They will upload the solution file to the virtual campus by 21st November, 2015. It will be assessed for the mark: *i)* quality and fit of the presented solutions, *ii)* competence in applying the theory to the case, *iii)* writing skills, including the ability to communicate an understandable and congruent solution.

The final, written exam. Composed by 3-5 essay questions, it weights 60% on the final grade (up to 6 points).

To pass the course the student will have to achieve in the final exam a minimum of 2 points over the maximum mark of six and achieve a minimum of 5 points, after having added the marks obtained in the continuous assessment (individual and group assignments) to the mark of the final exam. The grade obtained in the continuous assessment will be considered in all grading periods during the current academic course.

Those students not wishing to participate in the continuous assessment activities (necessarily carried out and evaluated during the semester) may pass the course in any of the grading periods, as long as they get at least 5 points in the final exam over the maximum mark of six –i.e. after applying the 60% weighting to the exam grade.

The table below sums up the weights of the several activities to be evaluated, as well as the minimum requirements for students.

| Evaluation | Weights in final grade (in points) |
|---|--|
| <p>Continuous assessment</p> <p>Periodical Assessment tests</p> <p>Team assignment</p> <p>Individual assignment</p> <p>Prerequisites: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Hoever, in order to add the marks of the Continuous assessment to the final exam mark, the student will have to achieve in the final exam a minimum of 2 points over the maximum mark of six.</p> <p>Continuous assessment activities require attendance to theory, practice-based and group tutorial sessions (previous individual or team work is expected)</p> | <p>Up to 1</p> <p>Up to 1.5</p> <p>Up to 1.5</p> |
| <p>Final exam (in all evaluation periods)</p> <p>Compulsory: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> | <p>Up to 6</p> |

8. Materials and references

Basic reference:

- BRICKLEY, J., C. SMITH y J. ZIMMERMAN, 2004, Managerial Economics and Organizational Architecture, McGraw-Hill Irwin, Boston.
- MILGROM, P. y J. ROBERTS, 1992, Economics, Organization and Management, Prentice Hall, Englewood Cliffs, New Jersey.

Additional references:

Arruñada Sánchez, B. (2013): *Empresa, Mercado e instituciones*, Civitas, Pamplona.

Gibbons, R. and J. Roberts (2013) (editors): *The Handbook of Organizational Economics*, Princeton University Press, Princeton.

Gómez Mejía L. R., Balkin D. B. and R. L. Cardy (2013): *Managing Human Resources*, 7ª ed. Prentice Hall.

Subject Guide

1. Information about the subject

| | | | | |
|------------------------------|---|-------------------------|--|----------------|
| SUBJECT | Estadística Empresarial/Business Statistics | | CODE | GCONFI01-3-002 |
| EDUCATIONAL OFFER | Degree in Accounting and Finance | CENTER | Facultad de Economía y Empresa School of Economics and Business | |
| TYPE | Obligatoria/Compulsory | N° TOTAL CREDITS | 6.0 | |
| PERIOD | First Semester | LANGUAGE | Castellano | |
| COORDINATORS/ES | | EMAIL | | |
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2. Context

Business Statistics is a compulsory course in the first semester of the third year of the degree in Accountancy and Finance which is part of the “Quantitative Methods” module

Following in from the first year course *Introduction to Economic Statistics* in which students gained knowledge of descriptive statistics and economic statistics, the overall objective of *Business Statistics* is to provide students with a set of statistical tools for solving problems based on sample information. Probability models associated with economic phenomena are studied as well as the main tools of statistical inference: estimation and hypothesis testing with a special focus on the most common auditing procedures.

3. Requirements

None

4. Competencies and learning results

Contents and teaching methodology have been designed in order to provide students with the following set of general and specific skills:

General skills

- Capability for analysis and synthesis.
- Skill at searching for and analysing information in the working environment.
- Capability for using ICT tools.
- Capability for problem solving
- Critical and self-critical capability.
- Ethics and concern for quality.
- Capability for working independently.
- Capability for putting knowledge into practice.

Specific skills

- Apply quantitative tools for the analysis of financial information.

Learning outcomes

- Use probability models in order to describe the behaviour of economic phenomena.
- Apply inferential statistical tools to solve economic and business problems.
- Use statistical software for problem-solving.

5. Contents

Course contents are organized in two parts: the first one, corresponding to units 1 to 4, deals with Probability and the second, corresponding to units 5 to 8, focuses on Statistical Inference.

5.1. Abbreviated programme

Unit 1.- Uncertainty and probability

Unit 2.- Random variables

Unit 3.- Probability models

Unit 4.- Random vectors. The Central Limit Theorem

Unit 5.- Introduction to Statistical Inference. Samples and estimators

Unit 6.- Interval estimation

Unit 7.- Hypothesis testing (I)

Unit 8.- Hypothesis testing (II)

5.2.- Detailed programme and learning outcomes

Unit 1.- Uncertainty and probability

1.1.- Uncertainty and random experiments

1.2.- Axiomatic definition of probability

1.3.- Conditional probability and independence

1.4.- Total Probability and Bayes' Theorem

Objectives:

The aim of this unit is for students to become familiar with the concept of probability as a tool to quantify the uncertainty associated with random phenomena. On completion of this unit students should be able to:

- Identify a probability measure by means of its axiomatic definition
- Apply properties of probability measures
- Calculate conditional probabilities
- Understand the concept of probabilistic independence
- Identify partitions of the sampling space and apply the Total Probability Formula
- Calculate posterior probabilities using Bayes' Theorem

References:

PÉREZ, R. and LÓPEZ, A.J. (2011): *Métodos Estadísticos para Economía y Empresa*. [online at <http://goo.gl/z05TR>]. Unit 1.

Unit 2.- Random variables

2.1.- Random variable. Discrete and continuous variables

2.2.- Probability distribution of random variables

2.3.- Characteristics of random variables

Objectives:

This unit is aimed at familiarizing students with the concept of random variable and its probability distribution. On completing the unit, students should be able to:

- Understand and formalize the concept of random variable
- Distinguish between discrete and continuous random variables
- Calculate probabilities associated with random variables by means of the distribution function, the probability function in the discrete case and the density function in the continuous case
- Calculate and interpret the characteristics of random variables: expected value and variance

References:

PÉREZ, R. and LÓPEZ, A.J. (2011): *Métodos Estadísticos para Economía y Empresa*. [online at <http://goo.gl/z05TR>]. Unit 2.

Unit 3.- Probability models

3.1.- Binomial model

3.2.- Geometric model

3.3.- Hypergeometric model

3.4.- Poisson model

3.5.- Normal model

Objectives:

This unit intends to familiarize students with the main probability models, both discrete and continuous. The learning objectives for this unit are:

- Identify dichotomous or Bernoulli trials
- Identify the main discrete probability models and the underlying conditions for their application: binomial, geometric, hypergeometric and Poisson models
- Identify the normal model and manage its main properties
- Work with the expressions for the expected value and the variance of the main probability models

References:

PÉREZ, R. and LÓPEZ, A.J. (2011): *Métodos Estadísticos para Economía y Empresa*. [online at <http://goo.gl/z05TR>]. Unit 3.

Unit 4.- Random vectors. The Central Limit Theorem

4.1.- K-dimensional random variables and their characteristics

4.2.- Aggregating random variables

4.3.- The Central Limit Theorem and its applications

Objectives:

In this unit the concept of random variables is extended to the two-dimensional case and one of the main results of Statistics, the Central Limit Theorem, is introduced. On completing the unit, students should be able to:

- Work with two-dimensional random variables and their corresponding marginal and conditional distributions
- Calculate and interpret measures of linear correlation for two-dimensional distributions
- Understand the concept of independent random variables and their main properties
- Deduce the characteristics of the aggregates sum and mean
- Approximate probabilities of aggregates through normal probabilities on the basis of the Central Limit Theorem

References:

PÉREZ, R. and LÓPEZ, A.J. (2011): *Métodos Estadísticos para Economía y Empresa*. [online at <http://goo.gl/z05TR>]. Unit 4.

Unit 5.- Introduction to Statistical Inference. Samples and estimators

5.1.- Inferential methods. Population and samples

5.2.- Sampling methods

5.3.- Parameters and estimators

5.4.- Properties of estimators

5.5.- Methods for finding estimators

Objectives:

This unit is aimed at familiarizing students with inferential techniques. After completing the unit students should be able to:

- Understand the importance of sample information and its role in the inferential process
- Identify the main sampling techniques
- Calculate and interpret the bias and the mean square error of estimators
- Understand the properties of unbiasedness, efficiency, sufficiency and consistency
- Deduce and interpret the maximum-likelihood estimator of a parameter

References:

PÉREZ, R. and LÓPEZ, A.J. (2011): *Métodos Estadísticos para Economía y Empresa*. [online at <http://goo.gl/z05TR>]. Unit 5.

Unit 6.- Interval estimation

6.1.- Estimating parameters. Associated probability models

6.2.- Confidence intervals

6.3.- Confidence intervals for common parameters

6.4.- Sample size determination

Objectives:

This unit focuses on methods for calculating confidence intervals. After completing the unit students should be able to:

- Understand the advantages and the limitations of point and interval estimation
- Interpret the characteristics of estimates: precision and confidence
- Describe and calculate probabilities for the chi-square, Student's t and Snedecor's F probability models
- Calculate confidence intervals for the mean, the variance and the proportion

- Work out the method for computing the minimum sample size to estimate the mean or the proportion within certain confidence and error limits

References:

PÉREZ, R. and LÓPEZ, A.J. (2011): *Métodos Estadísticos para Economía y Empresa*. [online at <http://goo.gl/z05TR>]. Units 6 and 7.

Unit 7.- Hypothesis Testing (I)

7.1.- Hypothesis testing framework

7.2.- Types of error. Alfa and beta risks

7.3.- Significance tests. P-value

Objectives:

This unit focuses on the general framework of statistical testing. After completing this unit students should be able to:

- State statistical hypotheses
- Identify type I and type II errors and their consequences
- State significance tests
- Interpret the significance level and the p-value

References:

PÉREZ, R. and LÓPEZ, A.J. (2011): *Métodos Estadísticos para Economía y Empresa*. [online at <http://goo.gl/z05TR>] Unit 8.

Unit 8.- Hypothesis Testing (II)

- 8.1.- Hypothesis tests for common parameters
- 8.2.- Tests for comparing populations
- 8.3.- Normality tests
- 8.4.- Applications of hypothesis testing to auditing and quality control

Objectives:

This unit has a more practical orientation and it is focused on building specific tests. When finishing the unit students should be able to:

- Perform tests for the mean, the variance and the proportion.
- Construct critical regions for these tests.
- Conclude these tests by means of the p-value.
- Test the normality hypothesis
- State and solve tests for quality assessment

References:

PÉREZ, R. and LÓPEZ, A.J. (2011): *Métodos Estadísticos para Economía y Empresa*. [online at <http://goo.gl/z05TR>]. Unit 8.

PÉREZ, R. and LÓPEZ, A.J. (1997): *Análisis de datos económicos II. Métodos inferenciales*. Ed. Pirámide. Chapter 11.

6. Methodology and working plan

Teaching is based on two types of activities: lectures and practical classes in sessions of one and a half hour each. These activities are complemented by practice in the computer lab. The working plan for in-class activities is as follows:

- Lectures: During these 1.5 hour-sessions the main concepts and methods of each unit will be introduced with presentations which are available in the Virtual Campus.
- Practical sessions: These sessions will cover theoretical and practical issues using the statistical tools previously explained in the lectures.
- Lab sessions: Each class will be divided into small groups of students in order to work in the computer lab. There will be four sessions of one hour each. These classes constitute a basic part of students' learning given the applied nature of this course. During lab sessions students will have to deal with examples closer to real world problems by means of the appropriate software. The software Gretl is used in the course.

Learning resources are available from the University of Oviedo's Virtual Campus (www.campusvirtual.uniovi.es). In addition to learning materials (lectures

presentations, tests, databases, useful links), the course website provides a series of tools for students' active participation and communication both with teachers and other students, through e-mail and forums. All course information will be uploaded in the website: course calendar, grades, surveys...

The following table summarizes course workload by type of activity and unit. Out of the total workload, 65.7% does not require students' attendance.

| <i>Units</i> | <i>Total hours</i> | In-class work | | | | | Out-of-class work | |
|--------------|--------------------|----------------------|--------------------------|-----------------------------|-------------------|--------------|--------------------------|--------------|
| | | <i>Lectures</i> | <i>Practical classes</i> | <i>Computer lab classes</i> | <i>Assessment</i> | <i>Total</i> | <i>Individual work</i> | <i>Total</i> |
| 1 | 9 | 1.5 | 1.5 | 1 | | 4 | 5 | 5 |
| 2 | 12 | 2.5 | 2 | | | 4.5 | 7.5 | 7.5 |
| 3 | 15 | 2.5 | 2.5 | | | 5 | 10 | 10 |
| 4 | 21 | 3 | 3 | 1 | | 7 | 14 | 14 |
| 5 | 20.5 | 3.5 | 3 | | | 6.5 | 14 | 14 |
| 6 | 21.5 | 3.5 | 3 | 1 | | 7.5 | 14 | 14 |
| 7 | 12 | 2 | 2 | | | 4 | 8 | 8 |

| | | | | | | | | |
|--------------------|------------|-------------|-----------|----------|----------|-------------|-------------|-------------|
| 8 | 23 | 4 | 4 | 1 | | 9 | 14 | 14 |
| Final exam | 16 | | | | 4 | 4 | 12 | 12 |
| Total hours | 150 | 22.5 | 21 | 4 | 4 | 51.5 | 98.5 | 98.5 |
| (%) | 100% | 15% | 14% | 2.7% | 2.7% | 34.3% | 65.7% | 65.7% |

The following table shows an estimated schedule of the course, organized over 14 weeks:

| Week | In-class activities | Out-of-class activities |
|-------------|---|--------------------------------|
| 1 | Course presentation Unit 1.- Uncertainty and probability | Study of unit 1 |
| 2 | Unit 2.- Univariate random variables | Study of theory unit 2 |
| 3 | Unit 2.- Characteristics of random variables Unit 3.- Discrete probability models First session in the computer lab | Study of unit 2 |
| 4 | Unit 3.- The normal probability model | Study of unit 3 |
| 5 | Unit 4.- K-dimensional random variables | Study of unit 4 |
| 6 | Unit 4.- The Central Limit Theorem. Second session in the computer lab | Study of unit 4 |
| 7 | Unit 5.- Introduction to Statistical Inference | Study of theory unit 5 |

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|----|--|------------------------|
| 8 | Unit 5.- Estimators | Study of unit 5 |
| 9 | Unit 6.- Confidence intervals | Study of theory unit 6 |
| 10 | Unit 6.- Confidence intervals Third session in the computer lab | Study of unit 6 |
| 11 | Unit 7.- Introduction to hypothesis testing | Study of unit 7 |
| 12 | Unit 8.- Tests for the mean, the variance and the proportion | Study of theory unit 8 |
| 13 | Unit 8.- Other hypothesis tests | Study of unit 8 |
| 14 | Review of hypothesis testing Fourth session in the computer lab | Study of unit 8 |

7. Evaluation of the student's learning results

Course evaluation will be based on two elements:

1. **Continuous assessment** of students' effort and work throughout the course by means of different types of individual activities. Its weight in the final score is 40%.
2. **Final exam**, consisting of a set of questions to assess the theoretical knowledge acquired by students and their ability to apply statistical tools to solve problems in economic and business contexts. Its weight in the final score is 60%.

Grading system

The final grade (GFINAL) will be calculated as a weighted average of the grades in the final exam (GEXAM) and the continuous assessment (GCONTINUOUS):

$$\mathbf{GFINAL = 0.6 \cdot GEXAM + 0.4 \cdot GCONTINUOUS}$$

Continuous assessment activities will be carried out during the first semester in order to allow students to show their progress towards the learning outcomes. Therefore, continuous assessment cannot be repeated and the grade will be kept for all examination periods.

For students in the system of differentiated assessment, the final exam will keep the weight of 60% and continuous assessment activities will be replaced by theoretical and practical issues about the different contents of the program, with a weight of 40 %.

8. Resources, bibliography and complementary documentation

Most of the teaching resources for the course are available in the Virtual Campus www.campusvirtual.uniovi.es. The basic reference is an online book you may freely download. This reference as well as other textbooks which will be helpful are:

Basic reference

PÉREZ, R. and LÓPEZ, A.J. (2011): *Métodos Estadísticos para Economía y Empresa*. [Creative Commons, online at <http://goo.gl/z05TR>]

Further reading

CASAS, J.M. y otros (1998): *Problemas de Estadística*. Ed. Pirámide.

COTTRELL A.; LUCHETTI, R.: *Gretl User's Guide*, <http://sourceforge.net/projects/gretl/files/manual/>.

DIEZ; M.D. et al (2012): *OpenIntro Statistics* (2nd edition), [online] <http://www.openintro.org/stat/down/OpenIntroStatSecond.pdf>

LLORENTE, F. y otros (2001): *Inferencia estadística aplicada a la empresa*. Ed. Centro de Estudios Ramón Areces.

MARTÍN-PLIEGO, F.J.; MONTERO, J.M. y RUIZ-MAYA, L. (2006): *Problemas de probabilidad*. Ed. Thomson.

NEWBOLD, P. et al (2012): *Statistics for Business and Economics*, (8th edition). Pearson Education Limited.

PERALTA, M.J. y otros (2000): *Estadística. Problemas resueltos*. Ed. Pirámide.

PEREZ, R. (2010): *Nociones básicas de Estadística*. [online at <http://goo.gl/vjhiK>]

PÉREZ, R. and LÓPEZ, A.J. (1997): *Análisis de datos económicos II. Métodos inferenciales*. Ed. Pirámide.

WALPOLE, R.E. et al (2012): *Probability & Statistics for Engineers and Scientists* (9th edition), Pearson Education Limited.

Software

The statistical software used in this course is the open source statistical package Gretl, which is available for download at: <http://gretl.sourceforge.net/>