

**COURSE DATA****Data Subject**

<b>Code</b>	35959
<b>Name</b>	Business IT (Information Technology)
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	4.5
<b>Academic year</b>	2022 - 2023

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. Period</b>
1315 - Degree in Finance and Accounting	Faculty of Economics	4 Second term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1315 - Degree in Finance and Accounting	26 - Year 2 optional subjects	Optional

**Coordination**

<b>Name</b>	<b>Department</b>
PEREZ-SALAMERO GONZALEZ, JUAN M	113 - Financial and Actuarial Economics

**SUMMARY**

COMPUTING FOR BUSINESS is an optative subject that belongs to Departments of Accounting and Financial & Actuarial Economics. It is taught in the 2<sup>nd</sup> semester of the 2<sup>nd</sup> year in the Degree of FINANCE & ACCOUNTING. It values 4,5 ECTS credits.

The main objective of the subject is the practice applications' implementation and development, working exercises with finance and accounting content, using specific software.

This subject has two parts:

- MS-Excel & introduction to VBA with Excel
- Computing for Accounting



In the first part, following with the formation requirements that referee to computing applications' knowledge for applying modern methods for calculation and data management, we develop necessary elements for programming with Excel and VBA. This tool is a common software application today used by the finance and accounting expert. Moreover, the joint use of Excel and VBA allows achieve the objectives of calculation and information management.

In the second part, the main objective is that the students learn the use of computing for book-keeping and preparation of Financial Statements. For this, it's needed having studied the subject of Financial Accounting in the 1<sup>st</sup> Course.

The second part is divided in three subparts: trade transactions, employees' relationship and Public Administration, and finance operations.

## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

### Other requirements

- It is advised having passed the subject FINANCIAL ACCOUNTING of the 1st course.
- It is advised having passed the subject FINANCIAL MATHEMATICS
- Windows user knowledge

## OUTCOMES

### 1315 - Degree in Finance and Accounting

- Capacidad para la utilización de las hojas de cálculo para el tratamiento de los problemas económicos, empresariales y financieros.
- Capacidad para desarrollar aplicaciones informáticas personalizadas de gestión financiera y contable.



## LEARNING OUTCOMES

1. Knowledge of the most common computing tools to manage quantitative information.
2. Development and application of computing models to solve and analyze finance and accounting problems.

## DESCRIPTION OF CONTENTS

### 1. A SPREADSHEET: MS EXCEL

1. Presentation: MS- Excel as Decision Support System (DSS).
2. Setting of Excel
3. Edit data. Format.
4. Move and copy data.
5. References and names.
6. Presentation of documents. Print.

### 2. FORMULAS & FUNCTIONS

1. Formulas. References.
2. Audit of formulas.
3. Excel functions

### 3. GRAPHICS

1. Creation.
2. Graphic Assistant.
3. Format. Options.

### 4. DATA MANAGEMENT WITH MS-EXCEL

1. MS-Excel as Database.
2. Import and export data
3. Validate data
4. Formulary of data.
5. Organization of data.
6. Extraction of data. Filter.
7. Totalize sketches and consolidation.



## **5. ADVANCED TOOLS FOR ANALYSIS AND SIMULATION**

1. Tables of data
2. Administrator of Scenarios
3. Conditional Format.
4. Dynamic Tables and Graphics.
5. Search objective.
6. Solver.
7. Data analysis.

## **6. INTRODUCTION TO PROGRAMMING WITH VBA**

1. Editor of VBA. Basic Elements of VBA.
2. Macros.
3. Processes and personalized functions.
4. Elements of programming: Variables, constants and arrays. Structures of programming.
5. Objects and collections.
6. Controls, events and properties.
7. Protecting a Workbook.

## **7. INTRODUCTION TO COMPUTING FOR ACCOUNTING**

1. Programming.
2. Book-keeping.
3. References.
4. Extracts.
5. Key files.

## **8. ACQUISITION OF GOODS AND SERVICES**

1. Documentation of the purchase: the bill.
2. Inventory.
3. Non-current assets.
4. Services.
5. Returns.

## **9. OPERATIONS WITH EMPLOYEES & PUBLIC ADMINISTRATION**

1. Employees expenses.
2. Social Security.
3. Valued Added Tax (VAT)

**10. FINANCE OPERATIONS**

1. Bank loan
2. Bank discount.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Computer classroom practice	30,00	100
Theory classes	15,00	100
Development of individual work	7,50	0
Study and independent work	30,00	0
Preparation of evaluation activities	14,00	0
Preparation of practical classes and problem	16,00	0
<b>TOTAL</b>	<b>112,50</b>	

**TEACHING METHODOLOGY**

The development of this subject is structured in theory and practice lessons (TOTAL: 2.5 hours, approx., net of breaks).

**Methodology of the 1<sup>st</sup> part (MS-Excel & introduction to VBA with Excel):**

In theory lessons, that are one hour long, aprox., we introduce the new concepts of Microsoft Excel and Visual Basic, as well as the concepts that are related with financial applications.

In practice lessons, two h. aprox., we combine the account and solution of problems that are solved by the professor, as well as the execution of similar problems by the students. Practice classes are taught in a computing lecture room, and student must work with a computer.

**Methodology of the 2<sup>nd</sup> part (Computing for Accounting):**

In theory lessons, that are one hour long, aprox., we introduce the new concepts, that we relate with the subjects of Financial Accounting I and Financial Accounting II.

The teaching method that we use in theory lessons is the participative master class. This has the advantages of a classical master class, as well as it motives the students' participation and improves professor-student interaction.

In practice lessons, that are two hours long, aprox., students have available real business documentation, with account and financial content. Furthermore, we set out fictitious problems that students will solve.

Moreover, the professor can suggest activities that relate several topics of the subjects, and students must solve them.



## EVALUATION

The minimum grade to pass the course will be 5 points.

The evaluation of the contents and competences for this subject will be carried out through the continuous evaluation of the student's work and the completion of a synthesis test.

### Continuous assessment

It will be based on the participation and involvement of the student in the teaching-learning process (carrying out exercises, in class and / or at home, and scoring tests, ...).

The continuous assessment tasks of this subject are recoverable in the way that the teaching team reports, but always for the second call.

The continuous evaluation will have two parts (with the same weight in the grade): spreadsheet and computerized accounting.

Each of the two parts of the continuous evaluation will be scored from 0 to 10.

The final grade of the continuous evaluation will be the arithmetic mean of the grades of its two parts.

### Synthesis test

It can consist of both theoretical questions and practical exercises to solve on paper and/or using computer tools.

The synthesis test will have two parts: spreadsheet and computerized accounting, with equal weight in the grade.

Students have two calls for the synthesis exam.

### First exam session

#### *Synthesis test*

Each of the two parts of the test carried out will be scored from 0 to 10.

If the student does not provide an answer to any part of the exam, the course grade will be **0.0 - No presentado**.

In the first exam call, the synthesis test grade will be obtained as follows:

- If a score equal to or greater than 3 points is obtained in each of the two parts of the test, the summary test grade will be the arithmetic mean of the scores of the two parts.
- If a score of less than 3 points is obtained in any of the parts, the summary test grade will be the score of the part in which the lowest score was obtained.

#### *Final grade of the subject in the first exam session*





The final grade for the course in the first call will be obtained as follows:

- If the grade of the synthesis test in the first call is equal to or greater than 5, the final grade of the subject will be 70% of the final grade of the synthesis exam plus 30% of the final score of the continuous assessment.
- If the synthesis test grade is less than 5, the final grade of the subject of the first call will be the synthesis test grade.

### **Second exam session**

Students who did not obtain the minimum grade to pass the course in the first session have a new opportunity with the second session of the synthesis exam.

#### *Synthesis test*

In this second exam session, students can choose to answer one or both parts of the synthesis test. They will renounce the qualification obtained in the first call of the part of the synthesis test that they choose to answer in this second call.

In the second exam session, the qualification of the synthesis test will be obtained as follows:

- The part of the synthesis test that is not carried out in the second call, will maintain the score obtained in the first call.
- If a score equal to or greater than 3 points is obtained in each of the two parts of the test, the test grade will be the arithmetic mean of the scores of the two parts.
- If a score of less than 3 points is obtained in any of the parts, the test grade will be the score of the part in which the lowest score was obtained.

#### *Final grade of the subject in the second exam session*

The final grade for the course in the second exam session will be obtained as follows:

- If the synthesis test grade in the second call is equal to or greater than 5, the final grade of the course will be 70% of the synthesis test grade plus 30% of the final score of the continuous assessment.
- If the synthesis test grade is less than 5, the final course grade will be the synthesis test grade.

**NOTE: The use of illegal or fraudulent methods (copying, plagiarism, impersonation, etc.) to obtain undeserved results in the evaluable tests will be penalized with a zero in the test grade for those involved, subject to other penalties that may arise from the academic authorities. (see REGLAMENT D'AVUACIÓ I QUALIFICACIÓ DE LA UNIVERSITAT DE VALÈNCIA PER A TÍTOLS DE GRAU I MÀSTER. Approved by the Governing Council of May 30, 2017. ACGUV 108/2017).**

## **REFERENCES**



### Basic

- Cano Rodríguez, Manuel; Moreno Bonilla, Fernando (2010): Excel 2010 : modelos económicos y financieros. Guía práctica. Anaya Multimedia, Madrid.
- Charte Ojeda, Francisco (2016): Excel 2016. Guía práctica. Anaya Multimedia, Madrid.
- REAL DECRETO 1514/2007, de 16 de noviembre, por el que se aprueba el Plan General de Contabilidad. BOE de 20 de noviembre del 2007.
- 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 específicos para Microempresas. BOE de 21 de noviembre del 2007.
- Material elaborado por profesores/as del Departament de Comptabilitat.
- Material elaborado por profesores/as del Departamento de Economía Financiera y Actuarial

### Additional

- CABELLO GONZÁLEZ, J.M. (2006): Valoración Financiera. Teoría y Práctica con Excel. Ed. DELTA, Madrid.
- CALBERG, C.G. (2007): Excel for Accountants. Ed. CPA911, Philadelphia.
- DELGADO CABRERA, J.M. (2016): Office 2016. Manual imprescindible. Ed. Anaya Multimedia, Madrid.
- JAKSON, M. Y STAUNTON, M. (2001): Advanced modelling in finance using Excel and VBA. Ed. Wiley.
- PÉREZ LÓPEZ, C. y MARQUÉS, F. (2007): Manual de aprendizaje Microsoft Excel 2007. Ed. Pearson Education, Madrid.
- SEREF, M.M.H.; AHUJA, R.K. Y WINSTON, W.L. (2011): Developing Spreadsheet-Based decision Support Systems. Using excel and VBA for Excel. Ed. Dynamics Ideas, Belmont (MASSACHUSSETTS).
- GUTIÉRRES CARMONA, Jairo (2013). Modelos financieros con Excel. ECOE Ediciones