

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

Code	36509
Name	Accounting Analytics
Cycle	Grade
ECTS Credits	6.0
Academic year	2023 - 2024

Study (s)

Degree	Center	Acad. year	Period
1332 - Degree in Business Intelligence and Analytics	Faculty of Economics	2	First term

Subject-matter

Degree	Subject-matter	Character
1332 - Degree in Business Intelligence and Analytics	9 - Contabilidad de Gestión	Obligatory

Coordination

Name	Department
APARISI CAUDELI, JOSE ANTONIO	44 - Accountancy

SUMMARY

Analytical Accounting is a compulsory course of 6 ETCS credits and takes place in the first semester of the second course of the Accounting module.

Analytical Accounting introduces the study of the financial data of a company, and the problems of its calculation and accounting acquisition, in order to obtain the figures relating to cost, revenues and profit margins that users of the information may need in order to make decisions.

This course complements the accounting training that the student has begun to acquire through the Accounting Information Systems course. It complements it through the valuation of inventories in processing companies and the more detailed analysis of the profit and loss statement.



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

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

Other requirements

In relation to other subjects of the same degree, no enrollment restrictions have been specified with other subjects of the study plan.

With respect to other types of requirements, this subject does not require prior knowledge in order to be taken. The study plan does not specify enrollment restrictions in relation to other subjects.

OUTCOMES

1332 - Degree in Business Intelligence and Analytics

- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Be able to solve problems and to communicate and spread knowledge, skills and abilities, taking account of the ethical, egalitarian and professional responsibility of the activity of business intelligence and analytics.
- Be able to make autonomous decisions in digital environments characterised by the abundance and dynamism of data.
- Know and know how to properly use the appropriate quantitative and qualitative methods to reason analytically, evaluate results and predict economic and financial magnitudes.
- Demonstrate skills for analysis and synthesis.
- Be able to learn autonomously.
- Be able to use ICT, both in academia and in professional practice.
- Design and implement cost allocation models based on the digital records of accounting information systems.
- Establish a system of business management indicators.
- Evaluate the internal control system within the framework of accounting information systems.



LEARNING OUTCOMES

- Design of an organization's cost system based on its production or service provision process.
- Calculate the cost of production of a good or service.
- Inventory valuation.
- Analyse margins and results and make decisions based on them.
- Use of standard costs in budget control.

DESCRIPTION OF CONTENTS

1. Topic 1. Analytical accounting: basic concepts.

- 1.1. Internal versus external scope of accounting: characteristics.
- 1.2. Analytical accounting: definition and objectives.
- 1.3. Basic terminology of analytical accounting.
- 1.4. Production costs and period costs.
- 1.5. External result and internal result.

2. Topic 2. Phases of cost analysis, allocation models and calculation methods.

- 2.1. The combination of factors for production. Limiting factors and production capacity.
- 2.2. Logical phases of cost analysis: classification, location and imputation.
- 2.3. Classification of costs.
 - 2.3.1. According to their nature: materials, labour and other production costs
 - 2.3.2. According to their function: provisioning, transformation, commercialization, administration and subactivity.
 - 2.3.3. According to their behaviour: fixed or structure and variables. Semi-fixed or semi-variable costs.
 - 2.3.4. According to the possibility of attribution: direct and indirect. Semi-direct costs.
 - 2.3.5. According to its calculation time: real and expected.
- 2.4. Location of costs.
 - 2.4.1. Cost centres: concept and classification.
 - 2.4.2. Primary distribution or distribution of costs between centres.
 - 2.4.3. Secondary distribution or internal settlement between related cost centres.
 - 2.4.3.1. Direct procedure.
 - 2.4.3.2. Sequential procedure.
 - 2.4.3.3. Reciprocal benefits procedure.
- 2.5. Imputation of costs. Concept of the work unit or imputation/activity unit of the costs of the centre.
- 2.6. Production classes: single, multiple and joint.
- 2.7. Cost allocation models: the cost bearer.
 - 2.7.1. According to the degree of attribution: complete and partial.
 - 2.7.2. According to the location: inorganic and organic.
 - 2.7.3. According to the moment of calculation: historical and predetermined.



- 2.7.4. According to the characteristics of the production: work orders and processes.
- 2.8. Principles (proportionality and identification) and calculation methods (rates/supplements or division).

3. Topic 3. Cost elements.

- 3.1. Concept and types of materials.
- 3.2. Valuation of the cost of the entries: the purchase price of the materials and the specific costs of the supply.
- 3.3. Calculation of the materials actually consumed.
 - 3.3.1. By direct measurement of the units consumed (permanent inventory).
 - 3.3.2. Measurement of the final inventory and estimation of the units consumed (periodic inventory).
- 3.4. Consumption valuation using criteria based on historical costs: average costs (VWAP or WAC) and stock depletion (FIFO).
- 3.5. Labour and other personnel costs: direct and indirect remuneration.
- 3.6. Remuneration on time worked and on quantity produced (remuneration systems for yields).
- 3.7. Cost-hour calculation of labour.
 - 3.7.1. Periodization of the cost of labour.
 - 3.7.2. Attendance time and activity time.
- 3.8. Amortization of the productive equipment based on time, use, and mixed procedures.
- 3.9. Other costs of the productive equipment.
- 3.10. Supplies and other external services.

4. Topic 4. Costs for manufacturing or work orders.

- 4.1. General characteristics of manufacturing order systems.
- 4.2. Scheme of accumulation of costs for production orders.
- 4.3. Real cost system versus normal cost system.
- 4.4. Budgeted indirect costs.
 - 4.4.1. Calculation of budgeted indirect cost rates.
 - 4.4.2. Determination and basic analysis of deviations.
 - 4.4.3. Imputation of the deviations in the calculation of the result.

5. Topic 5. Process costs.

- 5.1. Characteristics of the accumulation of costs by processes.
- 5.2. Problems of costing by division: measurement of production and obtaining equivalent units.
- 5.3. Criteria for allocating the cost to the units produced.
 - 5.3.1. FIFO criterion: homogeneous valuation of the finished units, and independent (differentiated) valuation of the finished units.
 - 5.3.2. Weighted Average Cost Criterion (WAC).

**6. Topic 6. Joint production.**

- 6.1. Joint production concept: co-products and by-products.
- 6.2. The imputation of joint costs between co-products.
 - 6.2.1. Criteria related to the physical units produced.
 - 6.2.2. Criteria related to sale or generation of value.
- 6.3. Treatment of the cost of by-products.
 - 6.3.1. Zero cost criterion.
 - 6.3.2. Market value criteria.

7. Topic 7. Budget and standard cost

- 7.1. Budgeting: concept and integration of budgets.
- 7.2. Rigid and flexible budgets.
- 7.3. Standard cost: definition and calculation phases.
- 7.4. Elaboration of the standard cost.
- 7.5. Application of the standard cost.
- 7.6. Analysis of deviations.
 - 7.6.1. Deviations from direct and proportional costs to production (materials and labour). Deviation (technical) in the quantity consumed. Deviation (economic) in the acquisition price.
 - 7.6.2. Deviation in specific supply costs.
 - 7.6.3. Deviations from indirect (non-proportional) costs to production. Transformation costs: technical deviation, in efficiency or in performance, economic deviation, deviation in activity, capacity or volume, budget deviation.
 - 7.6.4. Deviations in commercial and administrative costs.
- 7.7. Imputation of the deviations in the calculation of the result.

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	30,00	100
Computer classroom practice	30,00	100
Development of individual work	10,00	0
Study and independent work	30,00	0
Preparation of evaluation activities	10,00	0
Preparing lectures	15,00	0
Preparation of practical classes and problem	15,00	0
Resolution of case studies	10,00	0
TOTAL	150,00	



TEACHING METHODOLOGY

In relation to other subjects of the same degree, no enrollment restrictions have been specified with other subjects of the study plan.

With respect to other types of requirements, this subject does not require prior knowledge in order to be taken. The study plan does not specify enrollment restrictions in relation to other subjects.

EVALUATION

The final assessment of this subject is divided into two parts:

- The synthesis test (written exam) will count towards 80% of the final grade. To pass the course, it is considered a necessary requirement to have passed this synthesis test, with a minimum of 5 out of 10. The synthesis test will cover both theory questions and practical cases, and will be designed to ensure that this grade establishes the minimum level of knowledge that the student should have to pass the subject.
- The evaluation of the practical activities completed by the student during the course, and the continuous evaluation of the same, will represent 20% of the final grade for the course. If the student chooses not to take this assessment, the synthesis test (written exam) will be the maximum grade, which will be weighted by the corresponding 80%. Therefore, in the event that a student opts for the latter option, to pass the course, he/she must achieve a minimum of 6.25 out of 10.
- The minimum grade required to pass the course is 5 points out of 10 in the global calculation, which is obtained by adding the assessment obtained in the evaluation of practical activities (maximum 2 points out of 10) to the final grade of the synthesis test (written exam), provided that the requirement of having reached at least 5 out of 10 has been met.

In the resit exams, the continuous evaluation activities are not recoverable; that is, the same grade obtained in the first exam is maintained.

REFERENCES

Basic

- APARISI, J.A.; GANDÍA, J.L.; HUGUET, D. Y MONTAGUD, M.D. (2017): Supuestos prácticos de Contabilidad de Costes. Editorial Ezcurra.

SERRA SALVADOR, V. (2003): Contabilidad de costes: cálculo, análisis y control. Tirant Lo Blanch, colección Manuales.

VILAR SANCHIS, E. (2000): Costes, márgenes y resultados: control de la rentabilidad económica. ESIC.



Additional

- BLANCO, I.; AIBAR, B. y RIOS, S.L. (2001): Contabilidad de costes. Cuestiones, supuestos prácticos resueltos y propuestos. Prentice Hall.

HORGREN, CH.T., FOSTER, G. y DATAR, S.M. (2002): Contabilidad de costos. Un enfoque gerencial. Prentice-Hall.

ORIOL, A. et AL. (2014): Contabilidad de Dirección para la toma de decisiones. Contabilidad de gestión y de costes. Coordinadores: Carlos Mallo y Alfredo Rocafort. Editorial PROFIT.