COMILLAS
UNIVERSIDAD PONTIFICIA
ICAI ICADE CIHS

Syllabus
2026 - 2027

TECHNICAL SHEET OF THE SUBJECT

Data of the subject	
Subject name	Financial Accounting and Data Analytics
Subject code	FCEE-BA23-221
Mainprogram	Bachelor's Degree in Business Analytics
Involved programs	Grado en Análisis de Negocios/Bachelor in Business Analytics y Grado en Relaciones Internacionales [Second year] Grado en Análisis de Negocios/Bachelor in Business Analytics [Second year] Grado en Ing. en Tecnologías de Telecom. y Grado en Análisis de Negocios/Bachelor in Busi. Analytics [Second year] Grado en Ing. en Tecnologías de Telecom. y Grado en Análisis de Negocios/Bachelor in Busi. Analytics [Second year]
Level	Reglada Grado Europeo
Quarter	Semestral
Credits	6,0 ECTS
Type	Básico
Department	Departamento de Gestión Financiera
Coordinator	Profª. Laura Lazcano Benito
Schedule	Consultar en intranet
Office hours	Consultar con el profesor correspondiente
Course overview	Accounting as an information system and as an indispensable tool for decision-making within the company: the company's net worth and its results. Fundamentals of financial statement analysis. Tools for managing information: accounts and the accounting cycle. The Conceptual Framework of Accounting: accounting principles and measurement criteria. The company's Annual Accounts.

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SPECIFIC DATA OF THE SUBJECT

Contextualization of the subject

Contribution to the professional profile of the degree

In the course **Financial Accounting and Data Analytics,** students learn how to manage a company's financial information as an indispensable instrument for decision-making. Students will learn the tools needed to record, present, and analyze the information contained in the Financial Statements, using a practical approach to interpreting business problems so that appropriate decisions can be made. In this course, data analysis techniques are applied to study and detect problems in the company's financial information and to report them to senior management.

Competencies - Objectives

Competences

Learning outcomes

CN3	Resultados del proceso de Formación y de Aprendizaje. CN3. Conoce las herramientas y técnicas analíticas avanzadas usadas por las empresas en el análisis, simulación y predicción de datos económico-financieros.
HA3	Resultados del proceso de Formación y de Aprendizaje. HA3. Aplica modelos de valoración financiera utilizando datos masivos procedentes de las empresas o del mercado financiero
CM3	Resultados del proceso de Formación y de Aprendizaje. Identifica y resuelve problemas empresariales, tomando decisiones sobre variables financieras.
RA 1	Contabilidad Financiera y Análisis de Datos/Financial Accounting and Data Analytics (6 ECTS). RA 1: Saber analizar los estados financieros para comprender la realidad empresarial mediante el uso de la normativa contable y de los instrumentos que derivan de las técnicas de Business Analytics.

THEMATIC BLOCKS AND CONTENTS

Contents - Thematic Blocks
BLOCK 1: Accounting, net worth and annual accounts
Topic 1: Accounting: a science and a business information system
1.1 The concept of net worth and equity 1.2 The concept of Accounting
Topic 2: Net worth and the balance sheet
2.1 Balance sheet items 2.2 Groups of balance sheet items 2.3 Analysis of assets 2.4 Analysis of liabilities 2.5 Analysis of equity 2.6 The balance sheet
Topic 3: Profit or loss for the year and the profit and loss account
3.1 Introduction 3.2 Expenses, income and results 3.2 The profit and loss account 3.3 The relationship between expenses, purchases and payments 3.4 The relationship between receipts and income 3.5 Distribution and allocation of profit
Topic 4: Fundamentals of economic and financial analysis and diagnosis
4.1. Introduction 4.2. Long-term solvency analysis: the company’s equilibrium positions and its level of indebtedness 4.3. Short-term solvency analysis: working capital and the liquidity cycle 4.4. Profitability analysis
BLOCK 2: Accounts and the accounting cycle
Topic 5: The study of accounts

5.1 The account

5.2 Terminology used for accounts

5.3 Analysis of asset, liability and equity accounts

5.4 Analysis of income and expense accounts

5.5 Double-entry bookkeeping in practice

Topic 6: The accounting cycle

6.1 Introduction

6.2 Sources of accounting information

6.3 Chronological record: the journal

6.4 Systematic record: the general ledger

6.5 The trial balance of totals and balances

6.6 The final information: the annual accounts

6.7 The inventory

7.8 Subsidiary ledgers

Topic 7: The administrative and speculative procedures

7.1. The administrative procedure for asset accounts

7.2. The administrative procedure for inventories

7.3. The speculative procedure for inventories

BLOCK 3: The Spanish General Accounting Plan (PGC): conceptual framework and accounting principles

Topic 8: Accounting standardisation and harmonisation

8.1. Users of accounting information

8.2. Accounting standardisation

8.3. Accounting harmonisation

8.4. The General Accounting Plan

8.5. The chart of accounts

Topic 9: The conceptual framework, accounting principles and measurement criteria

9.1. The conceptual framework: introduction

9.2. The true and fair view

9.3. Requirements of accounting information

9.4. Accounting principles

9.5. Recognition criteria for the elements of the annual accounts

9.6. Measurement criteria

Topic 10: Year-end adjustments (I): consequences of the prudence principle: accounting depreciation and impairment.

10.1. The prudence principle and the depreciation of assets

10.2. Accounting depreciation: meaning and consequences

10.3. Accounting depreciation methods

10.4. Contra accounts (I): accumulated depreciation

10.5. Contra accounts (II): impairment of asset values

Topic 11: Year-end adjustments (II): consequences of the accrual principle: the accrual of expenses and income

11.1. The concept of accrual adjustment

11.2. Deferred payments and receipts

11.3. Payments and receipts in advance: prepayment and accrued income accounts

BLOCK 4: Financial statements and cash flows

Topic 12: Financial statements and cash flows

12.1 The company’s complete financial statements

12.2 Cash flows

TEACHING METHODOLOGY

General methodological aspects of the subject

In-class Methodology: Activities

Lecture-based lessons provide theoretical explanations and guide the study of each topic.

Learning is a task that belongs to the student and that no lecturer can carry out on their behalf. In lectures, lecturers will focus on developing the content they consider most important and/or most difficult to understand. Students must have worked through each topic before it is presented in class. To verify that students are meeting this obligation, lecturers may assign short exercises before a topic is presented. They may also set such exercises at the end of the class to check how well the various topics have been understood.

The resources the lecturer will use to deliver the lectures include: IT resources (PowerPoint, Word, and Excel presentations), electronic resources (videos), transparencies, the whiteboard, and any other resource deemed appropriate in each case.

Exercises and the solving of cases and problems. The activities specific to these classes will include, among others, the theoretical development of the lectures, participatory and dynamic work between students and the lecturer, and the completion of exercises on the whiteboard or in Excel, either individually or in groups.

Whenever the lecturer considers it appropriate, short written tests will be set with a threefold purpose:

- They allow the lecturer to check that the student has read the topic beforehand (in the case of tests taken before the topic is explained).
- They allow the lecturer to check that the student has properly understood the most relevant aspects of the topic (in the case of tests taken after the topic has been explained).
- They allow the student to assess their own level of understanding of the topic.

These tests may be set without prior notice or announced in advance. They will be marked, assessed, and returned to the student for review.

Other activities: seminars, workshops, simulations, group dynamics, etc.

Research assignments, either individual or collective.

Assessment tests will be carried out both in groups and individually.

Non-Presential Methodology: Activities

1. Study of the theoretical content before and after class.

2. Completion of the practical exercises that will be corrected in class.

3. Group work.

The main aim of independent work is the understanding and solving of the proposed exercises, as well as of the theoretical content required to complete them. Independent work is a means of studying the course and not an end in itself for obtaining a grade.

SUMMARY STUDENT WORKING HOURS

CLASSROOM HOURS

Lecciones de carácter expositivo	Ejercicios y resolución de casos y de problemas	Otras actividades, seminarios, talleres, simulaciones, dinámicas de grupo, etc
11.00	46.00	8.00
NON-PRESENTIAL HOURS		
Estudio y lectura organizada	Pruebas de evaluación	
75.00	10.00	
		ECTS CREDITS: 6,0 (150,00 hours)

EVALUATION AND CRITERIA

The use of AI to produce full assignments or substantial parts thereof, without proper citation of the source or tool used, or without explicit permission in the assignment instructions, will be considered plagiarism and therefore subject to the University's General Regulations.

Evaluation activities	Evaluation criteria	Weight
Final written examination	The mark will be between 0 and 10. If the student does not obtain a mark higher than 4.5, the examination will not be averaged with the remaining components of the final grade.	60 %
Mid-term examination covering topics 1–7	The mark will be between 0 and 10.	20 %
Active participation by the student, problem-solving, escape rooms and tests.	The mark for this part of the continuous assessment will take into account the various exercises, tests and quizzes carried out throughout the course, as well as students' contributions in class and the correction of exercises on the whiteboard.	20 %

Ratings

The final grade for the course will be numerical, between 0 and 10 points, in accordance with the following scale: 0–4.9 fail (suspenso); 5–6.9 pass (aprobado); 7–8.9 very good (notable); 9–10 excellent (sobresaliente).

The formula derived from the weightings set out in the previous section is, however, subject to the following rules:

- In order to pass the ordinary examination session (December–January / April–May, depending on the degree programme), the formula will be applied only if the final written examination obtains a minimum mark of 4.50 out of 10. Below this mark, neither the continuous assessment nor the mid-term test will be taken into account, and the grade will be a fail.
- If the student fails the ordinary session, they are entitled to an extraordinary session in June, in which the written or oral examination must obtain a minimum mark of 5.00 out of 10. The final grade will be the result of applying the following formula: FG = 0.7 × FE + 0.3 × CA, where FG is the "final grade"; FE is the mark obtained in the final examination of the extraordinary session; and CA is the continuous assessment, which is made up of 10% from the mid-term examination mark and 20% from the continuous coursework.

Below a mark of 5.0 in the examination, the above formula will not be applied and the grade will be a fail.

- From the third examination session onwards, the mark awarded will be the better of the following two: the mark obtained in the final examination (provided it is at least 5) or the mark obtained taking continuous assessment into account, where the student has completed it.

Attendance at teaching activities is compulsory for all students. Failure to attend more than one third of the on-campus classes may result in the student being unable to sit the examination in the ordinary session of the same academic year.

USE OF AI. Improper use of AI will be considered a serious offence under article 168.2.e of the General Regulations of the University: “carrying out actions intended to falsify or defraud the systems used to assess academic performance”. The consequences of this will be “temporary expulsion for up to three months or a ban on sitting examinations in the following session from the moment the penalty is imposed, in one or several of the courses in which the student is enrolled, [...] in addition to a fail grade (0) in the course concerned, [...] [and] a ban on sitting the examination for that course in the following session”.

Specifically, in this course the lecturer may allow the use of AI for particular course activities, in which case the student is required to comply with the following:

- The student must state explicitly and clearly what AI has been used for. All content created with AI must be labelled as such. All content that uses AI and has been adapted must also be labelled as such, in the same way that authors are cited.
- The student must include, as supplementary material (annexes), the complete prompt (questions and answers) of their conversation with the AI used to generate the assignment.

If the above obligations are not met, the student’s use of generative AI will be regarded as improper use for the purposes indicated above.

WORK PLAN AND SCHEDULE

Activities	Date of realization	Delivery date
Continuous coursework activities in class	Weekly	Weekly
Mid-term examination, topics 1 to 7	Between weeks 8 and 10	Between weeks 8 and 10
Final examination	At the end of the course	At the end of the course

BIBLIOGRAPHY AND RESOURCES

Basic Bibliography

- Muñoz Orcera, R.; Márquez Vigil, J. and Lazcano Benito, L. *Fundamentos de Contabilidad*. MacGraw Hill. Revised edition, Madrid, 2021.
- Websites: the course Moodlerooms page and http://www.icac.meh.es

Legal texts: Royal Decree 1514/2007 of 16 November, approving the Spanish General Accounting Plan, BOE of 20 November 2007, no. 278.