



TEACHING GUIDE - 2026-2027

Financial Economics

UGRA_002882

Departments	Department of Economics, Finance & Accounting
Teaching Languages	English
ECTS	6
Teacher responsible	Carlos Andrés Cuesta - carlos.andres@esade.edu Gabriela Ariadna Dumitrescu - ariadna.dumitrescu@esade.edu

Course Goals

Upon completing this course students should be able to:

- Identify the basic characteristics of different financial instruments.
- Evaluate the different financial instruments.

Previous knowledge

Geometric series, limits, derivatives, Taylor expansion and basic statistical concepts (mean, variance and correlation coefficient)

Prerequisites

Core and compulsory courses in Accounting and Financial Analysis, Mathematics, Statistics and Economics.

Teaching methodology

Lecture and participatory session activities:

- Lecture classes: Faculty will combine theoretical explanations and exercises.
- Participatory sessions: Students have to prepare and revise their exercise solutions prior to each session. During the latter, the class as a whole will discuss the different solutions proposed, faculty will resolve questions and doubts and students will sit short tests.

Workload distribution:

Lectures: 27.5 hours

Participatory sessions: 22.5 hours

Independent study: 97 hours

Exams: 3 hours

Description

Course contribution to

Financial markets serve as the framework to balance the supply and demand of the economy's available financial resources. Given that any economic activity requires financing, knowing how those financial markets as well as the assets negotiated within them work is a cornerstone of the education of any Business

program

Administration undergraduate degree programme.

Short description

Financial markets are where supply and demand of financial resources in the economy are balanced. Since any economic activity requires financing sources, a good understanding of the functioning of these markets and the assets traded on them represents a keystone in the education of any student of the Bachelor in Business Administration (BBA).

Bibliography

- , Class material (Website)
- , -Bodie, Kane and Marcus, Investments, McGraw-Hill, 2011. (Book)
- , -Brealey-Myers, Principios de Finanzas Corporativas, McGraw-Hill, 2003. (Book)
- , -Fabozzi, Fixed Income Mathematics, McGraw-Hill, 1997. (Book)
- , -Miner, Curso de Matemática Financiera, McGraw-Hill, 2003. (Book)
- , -Ross, Westerfield, Jafee, Finanzas Corporativas, Irwin, 1999. (Book)

Content

#	Topic
1	1. Financial mathematics 1.1. Introduction: Basic concepts; 1.2. Types of financial laws; 1.2.1. Simple capitalisation and discounts; 1.2.2. Compound capitalisation and discounts; 1.3. Income; 1.3.1. Classification; 1.3.2. Valuation; 1.4. Inflation; 1.5. Fractional capitalisation of interest; 1.6. Loan amortisation; 1.7. Investment selection criteria: NPV, IRR and payback; 1.7.1. Net Present Value (NPV) criteria: The criterion; 1.7.2. Payback criteria; 1.7.3. Internal Rate of Return (IRR) criteria
2	2. Fixed income 2.1. Introduction; 2.2. Fixed income profit; 2.2.1. Internal Rate of Return (IRR): The yield curve; 2.2.2. Term Structure of Interest Rates (TSIR); 2.3. Valuation; 2.4. Risk measures; 2.4.1. Duration; 2.4.2. Convexity; 2.5. Corporate fixed income
3	3. Portfolio theory 3.1. Asset return and risk; 3.2. Portfolio return and risk; 3.3. Diversification effect; 3.4. Efficient portfolios: the Markowitz model; 3.5. Generalisation of the Markowitz model: the risk-free asset; 3.6. Estimation of the efficient frontier; 3.7. Capital Asset Pricing Model (CAPM); 3.7.1. Market equilibrium: Capital Market Line; 3.7.2. Asset equilibrium: Security Market Line; 3.8. CAPM and valuation of variable Income: The dividend method; 3.9. Practical problems with CAPM implementation
4	4. Financial derivatives 4.1. Forwards; 4.2 Options

Assessment

Tool	Assessment tool	Category	Weight %
Quizzes/tests	Participatory Sessions	Retake and ordinary round	36.00%
Written and/or oral exams	Final Exam	Retake and ordinary round	64.00%

PROGRAMS

BBA20-Bachelor of Business Administration (BBA) (Undergraduates: Business)
BBA20 Year 2 (Mandatory)

BBA23-Bachelor of Business Administration (BBA) (Undergraduates: Business)
BBA23 Year 2 (Mandatory)

BBL24-Bachelor of Business Administration (BBA) (Undergraduates: Business)
BBL24 Year 1 (Mandatory)

DBAI21-Double Degree in Business Administration and Artificial Intelligence for Business (Undergraduates: Business)

DBAI21 Year 2 (Mandatory)

DBAI23-Double Degree in Business Administration and Artificial Intelligence for Business (Undergraduates: Business)

DBAI23 Year 2 (Mandatory)

GBD20-Double Degree in Business Administration and Law (Undergraduates: Law)
GBD20 Year 2 (Mandatory)

GBD23-Double Degree in Business Administration and Law (Undergraduates: Law)
GBD23 Year 2 (Mandatory)

GBL24-Double Degree in Business Administration and Global Governance, Economics and Legal Order (Undergraduates: Business)

GBL24 Year 2 (Mandatory)

GBL25-Double Degree in Business Administration and Global Governance, Economics and Legal Order (Undergraduates: Business)

GBL25 Year 1 (Mandatory)