

Course Unit	Markets Financial Instruments			Field of study	Finance			
Master in	Accounting and Finance			School	School of Technology and Management			
Academic Year	2023/2024	Year of study	1	Level	2-1	ECTS credits	6.0	
Туре	Semestral	Semester	1	Code	6395-515-1103-00-23			
Workload (hours)	162	Contact hours	T - TP :	36 PL - T	C - S 3	E - OT	9 0 -	
T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other								

Name(s) of lecturer(s) António Borges Fernandes

#### Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

- At the end of the course unit the learner is expected to be able to:

  1. Classify, distinguish and characterize diverse financial markets: organization, structure and rules of functioning.

  2. Explain the term structure of interest rates and the yield curve; understand the theories about the shape of term structure of interest rates.

  3. Calculate the bonds' price; understand concepts of duration and convexity.

  4. Calculate the intrinsic value of a share using several methodologies and determine the growth perspectives.

  5. Distinguish and characterize futures contracts, forward contracts and options contracts. Calculate the options' price and understand the basic strategies using options. options
- 6. Identify the characteristics of other derivatives as: swaps, FRA and others.
  7. Formulate hedging strategies or speculative strategies using derivatives, as well as arbitrage strategies to take advantage of the inefficiency of the futures and options.

  8. Describe the requirements of mark-to-market and margins of the futures and options contracts.

# Prerequisites

Before the course unit the learner is expected to be able to:

- Be fluent both oral and written English language.
   Understand and apply basic concepts of real analysis and financial mathematics
- 3. Use computational tools and database browsers

#### Course contents

Financial markets: functions, classification, organization, structure and functioning. Determination of the price of the financial assets. Theory and structure of interest rates and its determinants. The valuation of bonds: duration and convexity. The valuation of stocks: DDM model; finite holding period and PER. Derivative products: concepts, valuation and strategies of use; hedge ratio and the use of the delta hedging in the risk management. Financial innovation and structuralized products.

# Course contents (extended version)

- FINANCIAL MARKETS: functions, classification, organization, structure and functioning.
   DETERMINANTS OF FINANCIAL ASSETS PRICING AND INTEREST RATES.
   VALUATION OF BONDS.
   VALUATION OF STOCKS AND RIGHTS.
   VALUATION OF DERIVATIVES PRODUCTS.
   FINANCIAL INNOVATION, STRUCTURED PRODUCTS AND OTHER CONTINGENT ASSETS.

# Recommended reading

- Bodie, Z., Kane, A., & Marcus, A. (2011). Investments and Portfolio Management (9th ed.). McGraw-Hill.
   Fabozzi, F. J., & Modigliani, F. (2009). Capital Markets: Institutions and Instruments (4th ed.). Prentice-hall International Edition.
   Bastardo, C. (2015). Gestão de Activos Financeiros Back to Basis (2.ª ed.). Escolar Editora.
   Pinho, C., & Soares, I. (2018). Finanças Mercados e Instrumentos (3.ª ed.). Edições Silabo.
   Pires, C. (2011). Mercados e Investimentos Financeiros (3ª ed.). Escolar Editora.

# Teaching and learning methods

Theoretical-practical classes with audiovisual resources that is based on "learning by doing", involving active participation of students by interventions, individual and group work and problem and cases solving. Real-life case studies are incorporated into lectures to provide opportunities for students to apply theory into practice in a real context and help to consolidate the learning outcomes

# Assessment methods

- Alternative 1 (Regular, Student Worker) (Final)
   Practical Work 100% (5 practical works)
   Alternative 2 (Regular, Student Worker) (Final, Supplementary, Special)
   Final Written Exam 100%

# Language of instruction

Portuguese, with additional English support for foreign students.

# Electronic validation

António Borges Fernandes	Joaquim Agostinho Mendes Leite	Ana Paula Carvalho do Monte	José Carlos Rufino Amaro
09-10-2023	10-10-2023	29-10-2023	31-10-2023