Syllabus

Course Description

Course Title	Digital Finance and Financial Markets
Course Code	76408
Course Title Additional	
Scientific-Disciplinary Sector	
Language	English; Italian
Degree Course	Bachelor in Informatics and Management of Digital Business
Other Degree Courses (Loaned)	
Lecturers	Dottore di ricerca Corrado Botta, Corrado.Botta@unibz.it https://www.unibz.it/en/faculties/engineering/academic-staff/person/54049 dr. Silvia Bressan, Silvia.Bressan@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/37763
Teaching Assistant	
Semester	All semesters
Course Year/s	2
CP	12
Teaching Hours	84
Lab Hours	0
Individual Study Hours	216
Planned Office Hours	36
Contents Summary	- Time Value of Money - Risk and Return - Investment Decision Rules - Capital Budgeting - Capital Structure - Equity and Debt Financing - Financial system and Financial intermediation

	- Banks and Non-Banks - Capital Markets and Investment Banks - Asset Management
Course Topics	This module combines two interconnected courses: Principles of Corporate Finance and Financial Markets. The first part (Principles of Corporate Finance) focuses on understanding key financial decisions within companies: Which projects should be pursued? How do we value investments? What financing options are available, and how do capital structure and firm value interact? The goal is to build a solid foundation for analyzing and making financial decisions. ========== The second module (Financial Markets) deals with financial markets, treating in more detail the following topics: Financial markets: The role and importance of financial markets and financial intermediaries; types of financial markets. Banking intermediaries: Bank activities and bank management; bank regulation. Other financial intermediaries: Investment banks, brokers and dealers, venture capital firms, insurance companies, mutual funds, pension funds. Securities exchanged on financial markets: Money market instruments, capital market instruments (stocks and bonds), derivatives (futures, options, swaps). Risk management of financial institutions: Overview of different sources of financial risk with a focus on credit risk, interest rate risk, liquidity risk. Long-term trends in financial markets: Shadow banking and securitization, bank consolidation, digitalization and Fintech, ESG.
Keywords	Module one (Principles of Corporate Finance): - Investment analysis

	- Capital structure - Time value of money - Cost of capital (WACC, CAPM) ========== Module two (Financial Markets): - Financial markets and institutions - Bonds, stocks, derivatives - Financial risk management
Recommended Prerequisites	Attendance of the course Accounting for Decision Making (1st year) is strongly suggested.
Propaedeutic Courses	
Teaching Format	Module one (Principles of Corporate Finance): Classroom activity will alternate background lectures, applied exercises, examples based on practical short case studies, discussions and comments of current developments and events in financial markets and institutions related to topics covered in class. ==========0 Module two (Financial Markets): The course is developed in 42 hours of lessons of theory complemented by exercises and discussion on real financial markets cases.
Mandatory Attendance	Highly recommended, although not compulsory as per national regulation.
Specific Educational Objectives and Learning Outcomes	The course belongs to the type "attività formative affini o integrative". The course is designed to introduce the basic concepts of financial decision-making and financial management, and to demonstrate how these can be applied to real-life cases, with a particular but not exclusive focus on IT projects, digital firms, and technology-driven industries. In addition, the functions performed by financial markets and intermediaries within the financial system (e.g., banks) will be discussed as well as recent developments (e.g., token offerings). Students will understand how the interests of owners, debt holders and management of a firm may conflict, and

	how this influences optimal financing and decision-making. We will also study the factors that influence a firm's capital structure, how these decisions affect investment choices, and how financial markets and intermediaries evaluate and finance business activities. Knowledge and understanding: • D1.17 - Know further methods of Digital Finance and Digital Advertising and their application. • D.1.18 - Understand the interdisciplinary approach to IT projects that takes into account technical foundations, business needs, social and dynamic aspects and the regulatory framework. Applying knowledge and understanding: • D2.3 - Ability to analyse business problems and to develop proposals for solutions with the help of IT tools. • D2.4 - Ability to formalise and to analyse procedures and operational processes, to recognise and use optimisation potentials. • D2.6 - Ability to design, describe and present IT solutions to policy makers. • D2.9 - Ability to support the management of IT departments and software companies by providing information as needed. • D2.11 - Ability to analyse large amounts of data on economic facts and processes. • D2.13 - Ability to apply additional knowledge in the subjects of Digital Finance and Digital Marketing. • D2.18 - Know how to communicate with the client in written and oral form on a professional level in English, Italian and German. Making judgments • D3.1 - Ability to collect and interpret data useful for forming independent judgments on IT and economic aspects of information systems. • D3.3 - Ability to compare and evaluate different IT solutions based on their technical characteristics and key business figures. • D3.4 - Ability to assess fundamental economic and business facts on the basis of numerical data.

	Communication skills • D4.1 - Be able to use the three languages English, Italian and German and, in particular in English, be able to use appropriate technical terminology and communication style. • D4.2 - Ability to use modern means of communication also for remote interactions. • D4.3 - Ability to negotiate with people with different professional experiences the definition and requirements of corporate information systems. Learning skills • D5.2 - Learning ability to carry out strategic and IT project activities in corporate communities, also distributed. • D5.3 - Ability to follow rapid technological developments and to learn about innovative aspects of the latest generation of information technology and systems.
Specific Educational Objectives and Learning Outcomes (additional info.)	
Assessment	Module one (Principles of Corporate Finance): Attending students: Group work (30%) and final exam (70%); Non attending students: Open question (30%) and final exam (70%). ========== Module two (Financial Markets): Written exam for attending and non-attending students with theoretical review questions, multiple choice questions, and numerical exercises.
Evaluation Criteria	Module one (Principles of Corporate Finance): Attending students: Group work (30%) and final exam (70%); Non attending students: Open question (30%) and final exam (70%). ========== Module two (Financial Markets): Theoretical knowledge of the concepts covered in class and ability to solve financial problems.
Required Readings	Module one (Principles of Corporate Finance):

	J. Berk and P. DeMarzo, Corporate Finance, 6th Edition, Pearson.(English) ========== Module two (Financial Markets): Z. Bodie, A. Kane, A.J. Marcus, and N. M. Racculia, Investments, 14th edition, 2026, McGraw-Hill (Students can refer also to past editions of the English textbook) F.S. Mishkin, S.G. Eakins, “Financial Markets and Institutions”, 10th edition, 2023, Pearson (Students can refer also to past editions of the English textbook or to the Italian version of the textbook titled "Istituzioni e mercati finanziari") A. Saunders, M. Cornett and O. Erhemjamts, Financial Markets and Institutions, 9th edition, 2024, McGraw-Hill (Students can refer also to past editions of the English textbook or to the Italian version of the textbook titled "Economia degli intermediari finanziari")
Supplementary Readings	Supplementary readings (mainly slides and exercises) will be provided during the course and made accessible upon registration for the course on the OLE platform.
Further Information	Software used: Excel package
Sustainable Development Goals (SDGs)	Industry, innovation and infrastructure, Quality education

Course Module

Course Constituent Title	Principles of Finance for Computer Science
Course Code	76408A
Scientific-Disciplinary Sector	ECON-09/A
Language	English
Lecturers	Dottore di ricerca Corrado Botta, Corrado.Botta@unibz.it

	https://www.unibz.it/en/faculties/engineering/academic-staff/person/54049
Teaching Assistant	
Semester	First semester
CP	6
Responsible Lecturer	
Teaching Hours	42
Lab Hours	0
Individual Study Hours	108
Planned Office Hours	18
Contents Summary	• Time Value of Money • Risk and Return • Investment Decision Rules • Capital Budgeting • Capital Structure • Equity and Debt Financing
Course Topics	1. Introduction: the corporation, the financial manager and the goal of the firm. 2. Time value of money: Law of One Price, present and future value, annuities and perpetuities, loans and interest rates. 3. Investment decision rules: NPV, IRR, payback. 4. Capital budgeting: incremental earnings and free cash flows, NPV of a project, sensitivity analysis. 5. Risk and return: historical returns, diversification, systematic and idiosyncratic risk. 6. Cost of capital: CAPM and the security market line, cost of equity and cost of debt, WACC. 7. Capital structure: Modigliani-Miller propositions, leverage, interest tax shield. 8. Payout policy: dividends and share repurchases, taxes, signaling. 9. Group project: analysis of a real listed company with the tools of the module.
Teaching Format	Classroom activity will alternate background lectures, applied exercises, examples based on practical short case studies, discussions and comments of current developments and events in financial markets and institutions related to topics covered in class.

Required Readings	J. Berk and P. DeMarzo, Corporate Finance, 6th edition (2024), Pearson.
Supplementary Readings	A list of supplementary readings (slides, case studies, journal articles, etc.) will be provided during the courses and posted on the OLE platform.

Course Module

Course Constituent Title	Financial Markets
Course Code	76408B
Scientific-Disciplinary Sector	ECON-09/B
Language	Italian
Lecturers	dr. Silvia Bressan, Silvia.Bressan@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/37763
Teaching Assistant	
Semester	Second semester
CP	6
Responsible Lecturer	
Teaching Hours	36
Lab Hours	6
Individual Study Hours	108
Planned Office Hours	18
Contents Summary	• Financial system and Financial intermediation • Banks and Non-Banks • Capital Markets and Investment Banks • Asset Management
Course Topics	Financial markets: The role and importance of financial markets and financial intermediaries; types of financial markets. Banking intermediaries: Bank activities and bank management; bank regulation. Other financial intermediaries: Investment banks, brokers and

	dealers, venture capital firms, insurance companies, mutual funds, pension funds. Securities exchanged on financial markets: Money market instruments, capital market instruments (stocks and bonds), derivatives (futures, options, swaps). Risk management of financial institutions: Overview of different sources of financial risk with a focus on credit risk, interest rate risk, liquidity risk. Long-term trends in financial markets: Shadow banking and securitization, bank consolidation, digitalization and Fintech, ESG.
Teaching Format	The course is developed in 42 hours of lessons of theory complemented by exercises and discussion on real financial markets cases.
Required Readings	Z. Bodie, A. Kane, A.J. Marcus, and N. M. Racculia, Investments, 14th edition, 2026, McGraw-Hill (Students can refer also to past editions of the English textbook) F.S. Mishkin, S.G. Eakins, “Financial Markets and Institutions”, 10th edition, 2023, Pearson (Students can refer also to past editions of the English textbook or to the Italian version of the textbook titled "Istituzioni e mercati finanziari") A. Saunders, M. Cornett and O. Erhemjamts, Financial Markets and Institutions, 9th edition, 2024, McGraw-Hill (Students can refer also to past editions of the English textbook or to the Italian version of the textbook titled "Economia degli intermediari finanziari")
Supplementary Readings	Supplementary readings (mainly slides and exercises) will be provided during the course and made accessible upon registration for the course on the OLE platform.