Syllabus

Course Description

Course Title	Digital Finance and Financial Markets
Course Code	76408
Course Title Additional	
Scientific-Disciplinary Sector	
Language	English; German
Degree Course	Bachelor in Informatics and Management of Digital Business
Other Degree Courses (Loaned)	
Lecturers	Prof. Dr. Florian Kiesel, Florian.Kiesel@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/46474
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 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 part looks at the broader environment: How do financial markets work? What is the difference between banks and markets? How do bonds, stocks, and derivatives function? And what happens when markets are affected by information problems or crises? Topics include: - Time value of money, investment decision tools, cost of capital - Equity and debt financing, capital structure, payout policy - Functioning of bond and equity markets - Role of banks, intermediaries, and central banks - Portfolio choice, risk assessment, derivatives - Alternative finance (e.g., crowdfunding, cryptocurrencies) The courses are practical in nature. Exercises, real-world examples, and short case discussions are part of the teaching approach. The aim is not to memorize formulas but to understand core financial logic – and to speak the language of finance.
Keywords	- Investment analysis - Capital structure - Time value of money - Cost of capital (WACC, CAPM)

	- Financial markets and institutions - Bonds, stocks, derivatives - Information asymmetry
Recommended Prerequisites	Accounting for Decision Making (1st year) is strongly suggested.
Propaedeutic Courses	
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.
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	The assessment is based on three parts. - One case study on investment decisions during the M1 "Principles of Finance for Computer Science". - A written exam divided in two parts, one for each module: • the first part of the written exam covers the topics related to principles of finance (in English). • the second part covers the topic related to financial markets (German language). The first part of the written exam can also be passed in the form of a midterm held during the last lecture of the M1. Non-attending students will have only a final exam which covers all topics of the module.
Evaluation Criteria	• The case study counts 20% of the total grade. The case study is an individual project. For the case study, students have to evaluate an investment case and provide a solution to the problem. The case study is evaluated based on the assumptions made by the student, the level of detail and the final presentation of the results. • The two parts of the written exams count 40% each. The exams contain questions regarding financial theory but also practical exercises. Relevant for the first part of the written exam: clarity of answers, ability of problem solving, transferring knowledge, showing understanding of financial problems, ability to summarize knowledge, developing financial decision choices. Relevant for the second part of the written exam: understanding of financial markets, ability to summarize answers in own words, establish relationships between corporates and financial markets. Clarity in exam execution and quality of written English and German are essential to earn the passing grade.

	All three parts need to be passed independently.
Required Readings	Principles of Finance for Computer Science: · J. Berk and P. DeMarzo, Corporate Finance, 5th Edition (2020), Pearson. Financial Markets: · F.S. Miskin, S.G. Eakins, Financial Markets and Institutions, 9th edition, 2018, Pearson (English) · A. Saunders, M. Cornett und O. Erhemjamts, Financial Markets and Institutions, 9th edition, 2024, McGraw-Hill. · D. Dietrich, U. Vollmer, Finanzverträge und Finanzintermediation, 2005, Gabler Subject Librarian: David Gebhardi, David.Gebhardi@unibz.it
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.
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	Prof. Dr. Florian Kiesel, Florian.Kiesel@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/46474
Teaching Assistant	
Semester	First semester
CP	6
Responsible Lecturer	

Teaching Hours	42
Lab Hours	0
Individual Study Hours	108
Planned Office Hours	
Contents Summary	• Time Value of Money • Risk and Return • Investment Decision Rules • Capital Budgeting • Capital Structure • Equity and Debt Financing
Course Topics	
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	Principles of Finance for Computer Science: · J. Berk and P. DeMarzo, Corporate Finance, 5th Edition (2020), 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	German
Lecturers	
Teaching Assistant	
Semester	Second semester
CP	6
Responsible Lecturer	
Teaching Hours	36

Lab Hours	6
Individual Study Hours	108
Planned Office Hours	
Contents Summary	• Financial system and Financial intermediation • Banks and Non-Banks • Capital Markets and Investment Banks • Asset Management
Course Topics	
Teaching Format	Classroom activity will alternate background lectures, applied exercises, examples based on practical short case studies, discussions and comments of current development and events in financial market and institutions related to topics covered in class.
Required Readings	Financial Markets: · F.S. Miskin, S.G. Eakins, Financial Markets and Institutions, 9th edition, 2018, Pearson (English) · A. Saunders, M. Cornett und O. Erhemjamts, Financial Markets and Institutions, 9th edition, 2024, McGraw-Hill. · D. Dietrich, U. Vollmer, Finanzverträge und Finanzintermediation, 2005, Gabler
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.