Syllabus

Course Description

Course Title	Lab in Financial Trading (FIN III)
Course Code	25432
Course Title Additional	
Scientific-Disciplinary Sector	NN
Language	English
Degree Course	Master in Accounting and Finance
Other Degree Courses (Loaned)	
Lecturers	Dott.ssa Luisella Bosetti, Luisella.Bosetti@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/44014
Teaching Assistant	
Semester	Second semester
Course Year/s	2
CP	3
Teaching Hours	18
Lab Hours	-
Individual Study Hours	-
Planned Office Hours	9
Contents Summary	The course is designed to introduce students to the theory and practice of trading and market microstructure, by encompassing trading venues, dealer networks, and new trading platforms. The course content is consistent with the "Trading curriculum program" adopted by the CFA Institute for students seeking designation as a Chartered Financial Analyst (CFA). The main subject areas covered in the course are: a) the theory and stylized facts of market microstructure; b) trading behavior and monitoring in high-frequency trading markets; c) trading strategies, algorithmic and high frequency trading; d) transaction cost analysis and exchange trading fee pricing.

Course Topics	Laboratory in Financial Trading (LABFT) is a second-year course for students attending the M.Sc. in Accounting and Finance. LABFT is a graduate course designed to introduce students to the theory and practice of trading and market microstructure, by encompassing trading venues, dealer networks, and new trading platforms. LABFT will have an initial part (4-hour session) on the theory and empirics of market microstructure. Subsequently the course will progress to the practice of trading also with lectures given by professionals of trading and quantitative portfolio businesses. The course concludes discussing written assignments on topics connected to liquidity and market quality, trading strategies, and new dynamics in the Exchange industry environment. Attending LABFT provides students with an understanding that trading is not just about being smart. Winning in trading requires good ideas, which can come from, for example, a better understanding/analysis of news and quantitive metrics about a certain industry or company. However, ultimately, just like in a sport, the trader must know the other players and the rules of the game.
Keywords	Market microstructure, trading strategies, trading behaviour, transaction cost analysis, quantitative portfolio management.
Recommended Prerequisites	
Propaedeutic Courses	
Teaching Format	Classroom activity will alternate background lectures, exercises, and trading simulations.
Mandatory Attendance	
Specific Educational Objectives and Learning Outcomes	Knowledge and understanding: 'Master's graduates should be able to acquire an advanced level of preparation that allows for an articulate and integrated view of the finance issues of companies, financial intermediaries, financial institutions and markets. These learning outcomes are achieved through an advanced knowledge and understanding - of the economic-financial planning and evaluation of new investments; - of the characteristics associated with extraordinary moments in corporate management, such as capital transactions, recourse to

	financial markets, mergers and acquisitions, corporate crisis and reorganisation; - the problems and techniques of the organisation and financial management of companies and financial intermediaries; - the fundamentals of corporate finance for the correct application of, for example, decision-making models and financial data and risk management to treasury management; - of the management and profitability models of different types of intermediaries, market microstructure, operational efficiency of financial markets and the impact of financial markets on the profitability of intermediaries; - a wide range of investment, financing and risk management instruments, starting with the fundamentals of portfolio diversification and classical asset pricing and risk measurement models; - the specific finance issues that characterise the profession of financial analyst, portfolio manager, chief financial officer (CFO), chief administrative officer, controller, internal auditor and business consultant." Applying knowledge and understanding: Ability to apply knowledge in the area of Finance to be able to carry out analysis of complex problems in a national and international interdisciplinary context Ability to apply knowledge in the area of Finance for the design and implementation of corporate restructuring and other extraordinary operations Ability to apply knowledge in the area of Finance for the identification, evaluation and management of investments in financial markets Ability to apply knowledge in the area of Finance for the design of coherent financial management strategies in companies or financial intermediaries, competently applying acquired knowledge in risk management techniques, asset valuation, handling of derivatives Making judgements: Ability to apply acquired knowledge to make managerial and operational decisions and to solve problems in the administration and finance of companies, intermediaries and financial markets, jointly taking into account multiple perspectives of analysis, from

	economic to legal, financial, strategic, managerial Ability to select data and use appropriate information to describe a problem concerning the management of companies, intermediaries and financial markets. Ability to relate models and empirical evidence in the study of companies, intermediaries and financial markets. Communication skills: Ability to communicate effectively in oral and written form the specialised contents of the individual disciplines, using different registers according to the recipients and the communicative and didactic purposes, and to evaluate the formative effects of its communication Learning skills: "a) ability to use information technology autonomously to carry out bibliographic research and investigations and for one's own training and updating b) ability to identify thematic links and establish relationships between different cases and contexts of analysis c) ability to frame a new problem systematically and to generate appropriate taxonomies d) ability to develop general models from the phenomena studied;'.
Specific Educational Objectives and Learning Outcomes (additional info.)	Knowledge and understanding: Knowledge and understanding of operations of market structures and trading environments such as traditional exchanges, multilateral trading platforms, over-the-counter markets, private market platforms. The cost and benefit from trading. Structuring order placement and trading strategies in competitive and fast-moving trading markets. Link between quantitative portfolio management and trading strategies. Applying knowledge and understanding: Ability to use background theory and trading techniques to implement order management and execution in a trading platform. Students will learn 1) what is and how to use the implementation shortfall, one of several industry standard metrics to measure cost and efficiency in trading; 2) how to implement trading strategies to execute quantitative portfolios.

	Making judgments: The course combines the latest academic thinking with hands-on business practice and its main goal is that attending students should develop by the end of classroom activity an expanded ability to analyse and think about sound trading decisions, and to defend these decisions with analytical reasoning. Communication and Learning skills: Students should carefully read book chapters and supplemental readings and be prepared to discuss all assigned exercises/simulations and to prepare trading simulation. They can expect to be asked in class to present their trading execution ideas and how to implement them. Exercises, Case studies and supplemental readings (to be found in the library course shelf and Online Reserve Collection) are detailed in the course detailed syllabus and outline available in the course's OLE platform.
Assessment	Attending Students Student assessment will be a two-way process. In the first, student takes in-class quick tests per each Guest speaker Lecture. The test is performed through OLE Platform, which requires student to have available an electronic device (smartphone, tablet or laptop) to interact with OLE platform managed by UNIBZ ICT Services. The final exam consists of a prepared final course paper/case study on topics consistent with lectures presented at LABFT. As the LABFT is a short and compressed course, if a student misses more than one session, she/he will not be allowed to take "attending student" assessment in-class tests and paper/case study valuation, but she/he will be directed to take "not attending student" final exams (see below). Notice that student attendance will be enforced. Not Attending Students Not attending students will be assessed through a written final exam on the theory and empirical analysis of financial market microstructure. To prepare final exam students are encouraged to work through the required readings (the same assigned to attending students) as well as the supplementary readings (see below).
Evaluation Criteria	Attending students: 50% in-class test and 50% paper/case study

	Non attending students: 100% written exam
Required Readings	Attending students: • Teaching Slides and lecture notes to be downloaded from course UNIBZ OLE Platform. • Some further readings and notes could be available in course UNIBZ Library Reserve Collection (ULRC) or handed out in advance of specific class sessions. However, ULRC could be accessed through Course OLE Platform. Non attending studens, in addition to the above: • Barry Johnson, Algorithmic Trading & DMA - An introduction to direct access trading strategies • Larry Harris, *Trading and Electronic Markets: What investment professionals need to know*, CFA Institute Research Foundation, 2015. • Murgia-Pinna-Gottardo-Bosetti, *The impact of large orders in electronic markets,* International Review of Economics and Finance, 2019.Algorithmic Trading & DMA, Barry Johnson, 4Myeloma, 2011.
Supplementary Readings	Further useful references for gaining a better understanding of the theory, empirical analyses, practical ideas and regulation of microstructure of financial markets are: • Madhavan, 2000, Market microstructure: a survey, *Journal of financial markets*, Vol. 3, pp. 205-258. • Hasbrouck, 2007, *Empirical market microstructure: the institutions, economics and econometrics of securities trading.* Oxford University Press, New York. • Angel-Harris-Spatt, 2011, Equity trading in the 21st Century, *Quarterly Journal of Finance*, Vol. 1-1, pp. 1-53. • Amihud-Mendelson-Pedersen, 2012, *Market Liquidity – Asset pricing, risk and crises* – Cambridge University Press.
Further Information	
Sustainable Development Goals (SDGs)	Good health and well-being