

Syllabus

Descrizione corso

Titolo insegnamento	Econometria per la finanza
Codice insegnamento	25423
Titolo aggiuntivo	
Settore Scientifico-Disciplinare	SECS-P/05
Lingua	Inglese
Corso di Studio	Corso di laurea magistrale in Accounting e Finanza
Altri Corsi di Studio (mutuati)	
Docenti	prof. Francesco Ravazzolo, Francesco.Ravazzolo@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/36066
Assistente	
Semestre	Primo semestre
Anno/i di corso	2
CFU	6
Ore didattica frontale	36
Ore di laboratorio	-
Ore di studio individuale	-
Ore di ricevimento previste	18
Sintesi contenuti	Basics of stochastic processes theory, financial assets and returns. Analysis of empirical “stylized” facts. - Models and methods for predicting the level of future returns (Classical Linear Regression) and Time-Series Analysis (ARMA models): specification, inference, and forecasting. - Models for volatility analysis and prediction (EWMA, ARCH and GARCH models): specification, inference, and forecasting. - Models for macro-finance analysis: (volatility) term structure models. - Introduction to Bayesian Analysis and review of Monte Carlo

	Simulation Methods. - Special topics: cryptocurrency, energy markets, bond markets.
Argomenti dell'insegnamento	The course covers the tools of financial econometrics and empirical finance, with the focus on correlation analysis, classical linear regression and advanced time-series analysis. It introduces econometric modelling of financial prices and volatility, and estimation of some risk measures. Then, it extends to macro-finance problems. Strong emphasis is placed on the application of the models to real financial data.
Parole chiave	Stochastic Processes, Financial Time-Series Analysis, Volatility Modeling (ARCH/GARCH), Forecasting, Bayesian Analysis
Prerequisiti	Basic knowledge of statistics
Insegnamenti propedeutici	
Modalità di insegnamento	The course will combine in-class explanation of the background material, problem-solving and case discussions. Students will be expected to participate actively in class work, which will give them the opportunity to apply theoretical concepts to realistic situations.
Obbligo di frequenza	Strongly suggested, but not required
Obiettivi formativi specifici e risultati di apprendimento attesi	
Obiettivi formativi specifici e risultati di apprendimento attesi (ulteriori info.)	
Modalità di esame	Final Exam (50%): The final exam is a combination of problems, cases, and essay questions. Optional assignment (50%): Case studies will be assigned during the semester to be completed in writing and presented in class by groups of students. The questions included in the final exam are aimed at assessing the acquisition of knowledge and understanding the ability to apply them to new situations as well as to evaluate the skill of the student to analyse and report on complex business transactions. The case studies also measure the student's capability to search for the relevant regulatory and economic information that apply to a specific situation. If a student does not complete the assignment, the exam will

	weight 100%.
Criteri di valutazione	Final exam: 50% Assignment: 50% The student must pass the exam to have a passing grade in the course.
Bibliografia obbligatoria	Selection of papers provided by the teacher
Bibliografia facoltativa	CFA Institute Curriculum 2018 edition, Level II, Readings 9-11. Koop G. (2003). Bayesian Econometrics. Wiley. Stock J.M. and Mark W. Watson, <i>Introduction to Econometrics</i> . Pearson International 3rd Edition. Diebold F. X. (2006). Elements of Forecasting. Mason 4th Edition.
Altre informazioni	
Obiettivi di Sviluppo Sostenibile (SDGs)	Istruzione di qualità, Parità di genere, Energia rinnovabile e accessibile, Lotta contro il cambiamento climatico, Ridurre le disuguaglianze, Utilizzo responsabile delle risorse, Buona occupazione e crescita economica