

Syllabus

Descrizione corso

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Titolo insegnamento	Gestione del rischio finanziario
Codice insegnamento	27343
Titolo aggiuntivo	
Settore Scientifico- Disciplinare	SECS-P/11
Lingua	Tedesco
Corso di Studio	Corso di laurea in Economia e Management
Altri Corsi di Studio (mutuati)	
Docenti	prof. dr. Peter Alfons Schmid,
	PeterAlfons.Schmid@unibz.it
	https://www.unibz.it/en/faculties/economics-
	management/academic-staff/person/44766
Assistente	
Semestre	Primo semestre
Anno/i di corso	3
CFU	6
Ore didattica frontale	36
Ore di laboratorio	-
Ore di studio individuale	-
Ore di ricevimento previste	
Sintesi contenuti	This is an introductory course on risk management and financial products. The main contents are the mechanics and pricing of derivatives (forwards, futures, swaps and options). Students will be equipped with the knowledge of how to use such derivatives for risk management.
Argomenti dell'insegnamento	Functioning of futures markets; hedging strategies; determination of forward and future prices; swaps; functioning of options markets; trading strategies with options;

	Binomial trees; Vienna processes; Black-Scholes-Merton model;
	options on stock indices,
	currencies and futures; the "Greeks".
Parole chiave	Unconditional forward transactions (forwards and futures), swaps,
	options, binomial trees, Black-Scholes-Merton model, "Greeks"
Prerequisiti	
Insegnamenti propedeutici	
Modalità di insegnamento	Lectures
Obbligo di frequenza	Not mandatory, but recommended
Obiettivi formativi specifici e	Knowledge and understanding
risultati di apprendimento	Area: Quantitative methods for decision-making
attesi	Mastery of basic and intermediate mathematical tools for
	understanding and analysing economic mechanisms using
	theoretical models and empirical applications
	Knowledge of tools for statically, dynamically and comparatively
	analysing data on individuals, companies and the economy
	Knowledge and understanding of descriptive statistics, the basics
	of probability theory and sampling methods, standard distributions
	and their application to economic analyses as well as linear and
	non-linear regression
	Knowledge of parametric estimation and hypothesis testing
	Knowledge of the computer tools required for reading and
	analysing economic data and models
	Knowledge of the structure of computer networks, their most
	important applications and security techniques as well as
	techniques for collecting, visualising and analysing data using
	suitable software
	Knowledge of international accounting systems and double-entry
	bookkeeping for recording and evaluating business transactions
	Understanding of annual financial statements
	Thorough knowledge of accounting data collection or management
	control
	Knowledge of the analysis method for estimating present values
	and discount factors for estimating the cost of capital and the
	valuation of bonds and shares
	Knowledge of the methods of medium and long-term financial
	forecasting and sensitivity analysis with simulation under
	uncertainty for risk management in the area of corporate and
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international finance

Knowledge and understanding of the international financial environment, multinational risk defence techniques and competitive strategies of global banks

Knowledge of the mechanisms underlying effective communication of quantitative topics in three languages: Italian, German and English

Ability to apply knowledge and understanding

Area: Quantitative methods for decision making

Ability to analyse problems in (unconstrained) optimisation and mathematical interpretation of models of social and economic dynamics

be able to formalise and solve economic problems using mathematical models and interpret the results conceptually be able to analyse economic data using methods of descriptive, parametric and non-parametric statistics as well as linear and non-linear regression and interpret the results

be able to apply international accounting standards to the various contexts of corporate reality

Know how to derive and interpret economic information from the Internet

Know how to use computers and computer networks to analyse large amounts of data to solve complex problems and to write dissertations and articles

Know how to use spreadsheet programmes to value fixed-interest financial instruments and shares in listed companies be able to analyse financial statements using financial ratios and communicate the results in accordance with international professional standards

be able to apply the most important theories about capital, foreign exchange and commodity markets to current observational data, including international data

Knowledge of how to set up and carry out an empirical project using econometric software and financial or economic databases Be able to apply techniques to evaluate the performance of financial assets and understand the pricing mechanisms of highrisk financial assets and of spot and forward interest rates Ability to use basic and intermediate mathematical and statistical tools to investigate the behaviour of economic agents from a



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	theoretical and empirical perspective Knowledge of analysing economic data using spreadsheets or other suitable software knowledge of the use of computerised tools for analysing economies be able to communicate the results of quantitative analyses carried
	out according to international professional standards in three languages: Italian, German and English
	Making judgements make a critical analysis of the facts and the situations to be dealt with
	select the most appropriate quantitative and qualitative methods of analysis
	combine information and analytical methods, also using modern
	software packages, within the framework of a logical
	argumentation in order to find a solution
	Learning skills
	critically analyse and integrate data, information and future
	experiences, also using advanced software packages
Obiettivi formativi specifici e	
risultati di apprendimento	
attesi (ulteriori info.)	
Modalità di esame	Written examinations
Criteri di valutazione	Written examinations after 50% and at the end of the semester.
	1st session: Assessment based on the mid-term exam (33.33%) and the final exam (66.67%). Without participation in the mid-term exam: final exam (100%).
	2nd or 3rd session: final exam always 100%.
	Minimum points for a positive final examination: 18 out of 30+ points.
Bibliografia obbligatoria	John Hull: Options, Futures and Other Derivatives, Pearson, 11th edition, 2022.

Bibliografia facoltativa	
Altre informazioni	
Obiettivi di Sviluppo	Istruzione di qualità, Utilizzo responsabile delle risorse,
Sostenibile (SDGs)	Innovazione e infrastrutture, Buona occupazione e crescita
	economica