UNIVERSITÀ DEGLI STUDI DI BARI ALDO MORO

DIPARTIMENTO DI ECONOMIA, MANAGEMENT E DIRITTO DELL'IMPRESA

General information	
Academic subject	Financial Mathematics
Degree course	Business Economics
Academic Year	2021-2022
European Credit Transfer and Accumulation System (ECTS)	6
Language	Italian
Academic calendar	I semester
Attendance	no

Professor/ Lecturer	
Name and Surname	Viviana Fanelli
E-mail	viviana.fanelli@uniba.it
Department and address	Department of Economics, Management and Business Law
Virtual headquarters	Microsoft Team code: deil4aw
Tutoring (time and day)	On Tuesday h 9:30 online (Microsoft Team code: kbzl3r4)

Syllabus	
Learning Objectives	• Knowledge of financial assets and their evaluation. • The ability of the autonomous use of the financial techniques in several activities and works in the financial sector.
Course prerequisites	Passing the exam of Mathematics for Economics is required.
Contents	The basic rules for financial compounding. Interest rate estimation. Annuities. Accumulated and discounted values of an annuity. Temporal indices of an annuity. Loans. Kinds of amortization. Value of a debt. Financial evaluation. Internal Rate of Return (IRR), fixed income government bonds, TAN and APR. Elements of asset allocation.
Books and bibliography	Teaching material can be downloaded from webhttps://sites.google.com/site/vivianafanelli/teaching/universitadibari Hastings, Kevin J. Introduction to financial mathematics. CRC Press, 2015. R.L. D'Ecclesia e L. Gardini, Appunti di matematica finanziari. Parte I. Giappichelli, Ultima Edizione Daniele Ritelli, Matematica Finanziaria, Esculapio Editore, Bologna
Additional materials	

Work schedule			
Total	Lectures	Hands on (Laboratory, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
Hours			
122	48	12	110
ECTS			
6			
Teaching strategy	Lectures		
Expected learning outcomes			

Knowledge and understanding on:	Knowledge and understanding of the main mathematical tools frequently used in economic, business, and financial disciplines.
Applying knowledge and understanding on:	Ability to apply mathematical tools in an appropriate way to define, understand and solve evaluation and optimal choice problems in the business, economic and financial spheres.
Soft skills	• *Making informed judgments and choices:* ability to independently evaluate the quantitative tools to be used to solve problems in the business, economic and financial spheres. • *Communicating knowledge and understanding:* ability to present and communicate economic-financial topics in a clear and effective way and with scientific language acquired during the course. • *Capacities to continue learning:* ability to autonomously deepen the knowledge acquired during the course in order to tackle economic-financial problems.

Assessment and feedback	
Methods of assessment	Examination of Financial Mathematics consists of a written test and a subsequent oral examination.
Evaluation criteria	The student will be able to expose the topics covered in the course and solve related exercises. The student will be able to apply the mathematical tools provided during the course to make economic and financial choices and evaluations.
Criteria for assessment and attribution of the final mark	The evaluation elements that contribute to the attribution of the vote are: • knowledge and understanding of the course program topics, • the ability to apply the acquired knowledge in solving problems and proposed exercises, • communication skills.
Additional information	