



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Metodi Matematici

2021-2-E1802M118

Learning area

Learning objectives

The aim of the course is to give the main tools for the basics of series, integrals and linear algebra. Furthermore, it ..

Contents

Matematica Generale II: Sequences and series, integrals and linear algebra.

Matematica Finanziaria: The course presents the basic principles of traditional financial mathematics (also known as ..)

Detailed program

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2) Integrals: definitions, main results and computation.

3) Linear algebra: matrices, vectors and linear systems.

Matematica Finanziaria:

Capitalization Laws Financial transactions. Amounts, interest, discount. Capitalization laws and _____

Annuities and their classification. Value of an annuity in an instant t . Calculation of present and _____

Accrued capital. Repayment of a loan. Depreciation.

Financial operations in general: investments / financing, narrowly, side, general, pure. Selection _____

Bonds and their valuation: characteristics of a bond and profitability indicators. Term structure, _____

Prerequisites

Prerequisites are considered indispensable knowledge and mastery of the typical topics of the _____

Student who do not intend to subscribe to the HONOR CODE can write to their teacher to agree _____

Teaching methods

Matematica Finanziaria:

In the Covid-19 emergency period lessons will take place remotely in asynchronous _____

The study of each topic will end with a tutorial programmed remotely on Webex and advertised _____

Assessment methods

Matematica Finanziaria:

In the emergency period Covid-19 exams will be only remotely managed. They will be carried _____

The exams, after the health emergency, will be delivered in ways that will be, subsequently, _____

Emergency Covid-19

- **Two Partial Tests** (each test will consist of 16 multiple choice questions) to be performed _____

There are no other arrangements for partial tests.

Students who want to "improve" the grade obtained with the written tests, can ask to take an oral _____

- **Single test online** (the test will consist of 16 multiple choice questions) synchronously through _____

This final part of the exam is to be supported together with the conduct of multiple choice _

Also in this case, the oral exam will take place synchronously through scheduled appointments _____

Textbooks and Reading Materials

- "Successioni, serie e integrali", Manuale modulare di Metodi Matematici, vol. 5, a cura di Giovanna Carcano, edizioni Giappichelli Torino

- "Algebra lineare", Manuale modulare di Metodi Matematici, vol. 4, a cura di Maria Ida Bertocchi, edizioni Giappichelli Torino

- S. Stefani, A. Torriero, G.M. Zambruno: "Elementi di Matematica finanziaria e cenni di programmazione lineare" Giappichelli, 5 a ed., 2017
