UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Advanced Calculus - 1

2122-2-E1802M118-E1802M130M-T1

Learning area

Learning objectives

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

Contents

Sequences and series, integrals and linear algebra.

Detailed program

1) Sequences and series: definitions and analysis of the character of series by means of the main criteria.

2) Integrals: definitions, main results and computation.

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

Prerequisites

Functions in one and more variables.

Teaching methods

Lectures will be in presence or on line following the guidelines of the University.

Assessment methods

The final exam (on line or not depending on the santitary conditions) is composed by a written part (divided in open questions and exercises) and an oral part, both mandatory. The final mark takes into account both the valuations.

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