



## MATHEMATICAL ANALYSIS II M - Z

MAT/05 - 9 CFU - 1° Semester

### Teaching Staff

#### GIUSEPPA RITA CIRMI

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**Office Hours:** Lunedì ore 10-11.30 e Mercoledì ore 12.30-14.00. Eventuali variazioni verranno comunicate su Studium

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### LEARNING OBJECTIVES

The course aims to provide the basic knowledge of differential and integral calculus for real functions of several variables and the ODE's theory.

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### DETAILED COURSE CONTENT

Sequences and series of functions. Power series. Expansion of given functions in power series.

Functions of several variables: Continuity and differentiation. Local and global extrema. Implicit functions.

Multiple integrals. Curves. Differential forms. Conservative vector fields. ODE. Linear ODE.

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### TEXTBOOK INFORMATION

1. G.Fiorito, Analisi Matematica 2, Spazio Libri
  2. N.Fusco, P.Marcellini, C.Sbordone, Analisi Matematica 2, Liguori
  3. M.Bramanti, Esercitazioni di Analisi Matematica 2, Esculapio
  4. P.Marcellini, C.Sbordone, Esercitazioni di Matematica, Vol.2, Parte I e II,
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