



---

## MATHEMATICAL ANALYSIS II A - L

MAT/05 - 9 CFU - 1° Semester

### Teaching Staff

#### DANIELE PUGLISI

**Email:** dpuglisi@dmi.unict.it

**Office:** Dipartimento di Matematica e Informatica, viale A. Doria 6, 95125, Catania

**Phone:** 095-7383055

**Office Hours:** Martedì 9.00 - 12.00

---

### LEARNING OBJECTIVES

The aim of the course is to give students concepts of calculus II for several real variables function and problem-solving skills.

### COURSE STRUCTURE

The courses is developed in theory and exercises.

---

### DETAILED COURSE CONTENT

Sequences and Series of Functions. Solving methods of some kind of differential equations. Differential calculus for functions of several variables. Implicit functions. Lebesgue measure theory. Curvilinear integrals and differential forms.

---

### TEXTBOOK INFORMATION

- G. Emmanuele- Analisi matematica 2 vol.1. Pitagora Editore 2018.
- C. Pagani, S. Salsa - Analisi Matematica 2, Zanichelli Editore 2016.
- N. Fusco, P. Marcellini, C. Sbordone - Analisi Matematica 2, Liguori Editori, 2016.
- P. Marcellini, C. Sbordone - Esercizi di Matematica vol. 2, Liguori Editore, 2009.
- S. Salsa, A. Squellati - Esercizi di Analisi matematica 2, Zanichelli Editore, 2011.

---