



## FISICA GENERALE

FIS/02 - 8 CFU - 1° Semester

### Teaching Staff

#### ALESSANDRO PLUCHINO

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### LEARNING OBJECTIVES

Understanding the mechanisms of the scientific method and the main physical laws of mechanics, thermodynamics and electromagnetism. Ability to perform simple exercises on the topics of the program.

### COURSE STRUCTURE

Frontal lectures - Audiovisual material

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### DETAILED COURSE CONTENT

Fundamental physical quantities and units. Kinematics in one and two dimensions. Laws of Dynamics. Gravitation. Conservation of energy and momentum. Friction forces. Harmonic oscillator. Statics and dynamics of fluids. Calorimetry and Thermodynamics. Electrostatics and electrodynamics. Magnetism and electromagnetism.

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### TEXTBOOK INFORMATION

- 1) D.C.Giancoli, "Fisica", Ed.Ambrosiana, Milano
  - 2) D.Halliday, R.Resnick, J.Walker, "Fondamenti di Fisica" (sesta ed.), Ed.Ambrosiana, Milano
  - 3) P.J.Nolan, "Fondamenti di Fisica", Ed.Zanichelli, Bologna
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