
COURSE: GENERAL PHYSICS

ACADEMIC YEAR: 2017-2018

TYPE OF EDUCATIONAL ACTIVITY: : Basic

TEACHER: Prof. Nicola Cavallo

e-mail: nicola.cavallo@unibas.itwebsite: <http://oldwww.unibas.it/utenti/cavallo/home.htm>

phone: **0971206066**mobile (optional):

Language: **ITALIAN**

ECTS: **10** (lessons and tutorials/practice)n. of hours: **80** (lessons and tutorials/practice)Campus: **Potenza**
Dept./School: **Department of Sciences**
Program: **Pharmacy (LM-13)**Semester: **II**
(from **5 March 2018** to **31 June 2018**)

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

- The course aims to provide the fundamentals of classical kinematics, thermodynamics and electromagnetism. The students will learn the fundamental laws of electric and magnetic phenomena, described by means of an adequate mathematical formalism.
 - The students will also be able to solve numerical problems on the topics presented in the lectures
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PRE-REQUIREMENTS

- none
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SYLLABUS

- **Part 1 - Introduction (6/80 hours)**
 - Why Physics is important
 - Physics Quantities, Units and Measurement
 - Vectors
 - **Part 2 - Fundamentals of Mechanics (44/80 hours)**
 - Kinematics
 - Forces and Mechanical principles
 - Kinetic energy and work
 - Potential Energy and Conservation of Energy
 - Statics and Rotational Motion
 - Biomechanics
 - Fluids
 - Fluid in biological system
 - **Part 3 - Fundamentals of Thermodynamics (8/80 hours)**
 - Thermodynamics
 - Thermodynamics in biological system
 - **Part 4 - Fundamentals of electro-magnetism 22/80 hours)**
 - Electrostatics phenomena
 - Magnetic phenomena and Electromagnetism
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TEACHING METHODS

- Theoretical lessons
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EVALUATION METHODS

- Written Test & Oral Exams
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TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

- Textbook: Domenico Scannicchio - Fisica Biomedica (terza edizione), Casa Editrice EdiSES
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INTERACTION WITH STUDENTS

- Thursday, 10:30-11:30 - (Campus di Macchia Romana, Building 3D, 1° floor, room n.94b)
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EXAMINATION SESSIONS (FORECAST) ¹

- 9 January 2018
- 30 January 2018
- 26 June 2018
- 17 July 2018
- 4 September 2018
- 2 October 2018
- 11 December 2018

SEMINARS BY EXTERNAL EXPERTS

- None

FURTHER INFORMATION
