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| Course Unit | Physics | Field of study | Physical Sciences |
| Bachelor in | Environmental Engineering | School | School of Agriculture |
| Academic Year | 2023/2024 | Year of study | 1 |
| Type | Semestral | Semester | 2 |
| Workload (hours) | 162 | Contact hours | T - TP - PL - TC - S - E - OT - O - |
| | | Level | 1-1 |
| | | ECTS credits | 6.0 |
| | | Code | 9099-814-1203-00-23 |

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s) Amílcar Manuel Lopes António

Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:
Basic knowledge of Physics.

Prerequisites

Not applicable

Course contents

Units. Unit Conversion. Vectors.
Mechanics
Fluid Mechanics
Thermodynamics

Course contents (extended version)

1. Units. Unit Conversion. Vectors.
2. Mechanics:
 - Static
 - Kinematics
 - Dynamics
3. Fluid Mechanics:
 - Hydrostatic
 - Hydrodynamics
4. Thermodynamics:
 - Zero Law
 - 1st Law
 - 2nd Law

Recommended reading

1. A. L. Antonio, <http://www.esa.ipb.pt/grupofis>
2. Fundamentals of Physics 10th Edition by David Halliday, Robert Resnick & Jearl Walker. Wiley, 2007

Teaching and learning methods

Theoretical-Practical Classes.

Assessment methods

- Final Exam - (Regular, Student Worker) (Final, Supplementary, Special)

Language of instruction

1. Portuguese
2. Portuguese, with additional English support for foreign students.

Electronic validation

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| Amílcar Manuel Lopes António | Tomás de Aquino Freitas Rosa Figueiredo | Artur Jorge de Jesus Gonçalves | Maria Sameiro Ferreira Patrício |
| 05-02-2024 | 06-02-2024 | 09-04-2024 | 09-04-2024 |