

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

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)

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

Recommended reading

- A. L. Antonio, <http://www.esa.ipb.pt/grupofis>
- 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

- Portuguese
- Portuguese, with additional English support for foreign students.

Electronic validation

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05-02-2024	06-02-2024	09-04-2024	09-04-2024