

Course Unit	Physics		Field of study	Physics Sciences	
Bachelor in	Agronomic 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		9086-813-1202-00-23	
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)

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. <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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26-01-2024	26-01-2024	26-01-2024	26-01-2024