



IDENTIFYING DATA

Physics: Physics II

Subject	Physics: Physics II			
Code	P03G370V01202			
Study programme	(*)Grao en Enxeñaría Forestal			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Basic education	1st	2nd
Teaching language	Galician			
Department	Applied Physics			
Coordinator	González Fernández, Pio Manuel			
Lecturers	González Fernández, Pio Manuel			
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Web				
General description	<p>Didactic aims</p> <p>Dominate the concepts and physical laws of the thermodynamics and electromagnetism.</p> <p>Differentiate the physical appearances *involucrados in the resolution of a problem of engineering.</p> <p>Analyse, interpret and explain physical situations **cotias.</p> <p>Resolve problems of thermodynamics and electromagnetism applied the engineering.</p> <p>Dominate experimental technicians and handle it of instrumentation for the measure of physical magnitudes.</p> <p>*Design and schedule an experimental setting in team related with appearances of the physics applied.</p> <p>Dominate the acquisition of experimental data and his statistical treatment</p> <p>Dominate technicians of graphic representation and calculation of parameters of adjust.</p> <p>Present a report or technical memory (oral and writing) with utilisation of the new technologies.</p>			

Competencies

Code	
B1	Ability to understand the biological, chemical, physical, mathematical and representation systems necessary for the development of professional activity, as well as to identify the different biotic and physical elements of the forest environment and renewable natural resources susceptible to protection, conservation and exploitations in the forest area.
C6	Understanding and mastery of the basic concepts about the general laws of thermodynamics and electromagnetism and its application for the resolution of engineering problems.
D8	Ability to solve problems, critical reasoning and decision making

Learning outcomes

Expected results from this subject	Training and Learning Results		
Lana relation between competitions *and results, *and he weight of each competition inside wool matter show * in him *pdf *attach.	B1	C6	D8
http://forestales.uvigo.es/sites/default/files/06%20**Fisica%20*II.*Pdf#**overlay-**context=are/**content/competitions-*and-resulted-of-*learning-by-matter			

Contents

Topic	
1.THERMODYNAMICS	<p>1.1. INTRODUCTION TO THE THERMODYNAMICS</p> <p>1.2. THERMODYNAMIC PRINCIPLES</p> <p>1.3. IDEAL GASES</p>
2.ELECTROSTATICS	<p>2.1. PRINCIPLES OF THE ELECTROSTATICS</p> <p>2.2. CONDENSERS AND DIELECTRIC</p> <p>2.3. CONTINUOUS CURRENT</p>
3.ELECTROMAGNETISM	<p>3.1. MAGNETOSTATIC</p> <p>3.2. ELECTROMAGNETIC INDUCTION</p> <p>3.3. ALTERNATING CURRENT</p>

Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	20	30	50
Problem solving	15	22.5	37.5
Laboratory practices	17	25.5	42.5
Practices report	1	15	16
Short answer tests	1.5	0	1.5
Problem solving	2.5	0	2.5

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies

	Description
Lecturing	Exhibition by part of the professor of the contents of the matter, foundations and theoretical bases and guidelines of the exercises to develop by the student.
Problem solving	The professor gives the general guidelines for the resolution of problems or exercises related with the matter. The student has to develop the suitable or correct solutions by means of the application of formulas and the application of procedures.
Laboratory practices	Activities realised in the laboratory of application of the knowledges to concrete situations and of acquisition of basic skills and *procedimentalEs related with the matter. The student adopts an active role, developing diverse actions (realisation of an experiment, setting, manipulation of scientific instrumentation and taking of experimental data) to build his knowledge (graphic representation and deduction of the physical law that governs the experiment).

Personalized attention

Methodologies	Description
Lecturing	Resolution of doubts and customized help in tutorial schedule.
Laboratory practices	Resolution of doubts and customized help in tutorial schedule.
Problem solving	Resolution of doubts and customized help in tutorial schedule.

Assessment

	Description	Qualification	Training and Learning Results
Practices report	Formative evaluation, realised of a continuous way, carried out fundamentally in the classes of laboratory that allows a continuous follow-up and a *realimentación constructive. It will value the presence and active participation in classes and in works *grupales, by means of checklists and by direct observation, and the quality of the works and individual reports and of group.	20	B1 C6 D8
Short answer tests	It will evaluate the theoretical and practical knowledges of the matter using like objective instrument the answer written of several questions of theoretical application-practical.	35	B1 C6 D8
Problem solving	It will evaluate the theoretical and practical knowledges of the matter (35%) and the purchased in the classes of laboratory (10%) using like objective instrument the resolution written of problems and/or exercises.	45	B1 C6 D8

Other comments on the Evaluation

In each methodology (Memory of practices, Proof of short answer and Resolution of problems) requires show a basic competition and minimum, that establishes in Apt=30%.

Numerical final qualification on scale of 10 points, according to the legislation.

Sources of information

Basic Bibliography

Complementary Bibliography

Tipler P.A, **Física**, Barcelona, 1992,
 González P., Lusquiños F, **Fundamentos Físicos para Forestais**, Vigo, 2010,
 Sears F.W., Zemansky M.W., Young H.D., Freedman R.A, **Física**, México, 1999,
 Gettys W.E., Keller F.J., Skove M.J, **Física clásica y moderna**, Madrid, 1992,
 González P., Lusquiños F, **Física en imaxes**, Vigo, 2007,

Recommendations

Subjects that are recommended to be taken simultaneously

Mathematics: Overview of mathematics/P03G370V01203

Subjects that it is recommended to have taken before

Physics: Physics I/P03G370V01102

Mathematics: Mathematics and IT/P03G370V01103
