



IDENTIFYING DATA

Physics: Physics I

Subject	Physics: Physics I			
Code	P03G370V01102			
Study programme	(*)Grao en Enxeñaría Forestal			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Basic education	1st	1st
Teaching language	Galician			
Department	Applied Physics			
Coordinator	González Fernández, Pio Manuel			
Lecturers	González Fernández, Pio Manuel			
E-mail	pglez@uvigo.es			
Web				
General description	<p>Didactic aims</p> <p>Dominant the concepts and physical laws of the mechanics, fields and waves.</p> <p>Differentiate the physical appearances *involucrados in the resolution of a problem of engineering.</p> <p>Analyse, interpret and explain daily physical situations.</p> <p>Resolve problems of mechanics, fields and waves applied the engineering.</p> <p>Dominant experimental technicians and the handle 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>Dominant the acquisition of experimental data and his statistical treatment</p> <p>Dominant 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.
C2	Understanding and mastery of basic concepts about the general laws of mechanics, fields and waves and their 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. http://forestales.uvigo.es/sites/default/files/02%20**Fisica%20*I.*Pdf#**overlay-**context=are/**content/competitions-*and-resulted-of-*learning-by-matter	B1 C2 D8

Contents

Topic	
1. KINEMATICS	1.1.KINEMATICS OF THE MATERIAL POINT 1.2.KINEMATICS OF THE RIGID SYSTEMS
2. DYNAMICS	2.1. DYNAMIC OF THE POINT AND THE SYSTEMS 2.2. MOMENTS OF INERTIA 2.3. DYNAMIC OF THE BEEN USED TO RIGID
3. STATIC	3.1. LAWS OF STATIC
4. MECHANICAL SYSTEMS	4.1. FRICTION BETWEEN USED TO 4.2. YOU SCHEME SIMPLE 4.3. ELASTICITY
5. MECHANICAL SWINGS	5.1. FREE SWINGS 5.2. SWINGS CUISHIONED AND FORCED

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 *alumnado 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	C2	D8	
Short answer tests	They 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	C2	D8	
Problem solving	They 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	C2	D8	

Other comments on the Evaluation

 In each methodology (Memories of practices, Proof of short answer and Resolution of problems) requires show a basic and minimum competition, that establishes in Apt=30. Numerical final qualification on scale of 10 points, according to the valid 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,

Recommendations

Subjects that continue the syllabus

Physics: Physics II/P03G370V01202

Subjects that are recommended to be taken simultaneously

Mathematics: Mathematics and IT/P03G370V01103
