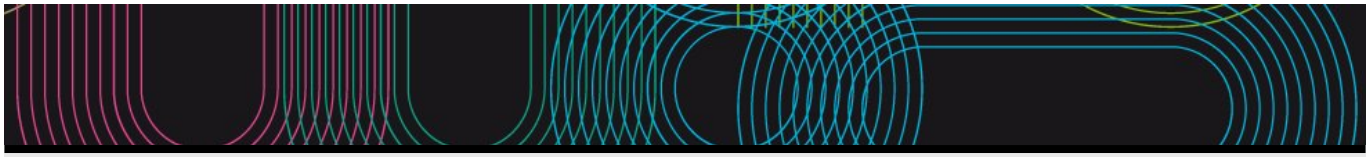
Universidade Vigo

Subject Guide 2017 / 2018



IDENTIFYING DATA				
Forestry machinery				
Subject	Forestry machinery			
Code	P03G370V01502			
Study programme	(*)Grao en Enxeñaría Forestal			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Mandatory	3rd	1st
Teaching language				
Department				
Coordinator	Diz Montero, Rubén			
Lecturers	Diz Montero, Rubén			
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General description	In this **asignatura pretends that he student *purchase *the *essential *knowledges that reads allow to comprise he *operation of wools machines *employed in wools forest *industries, that *know *the types of machines and *installations *more important *and *his *components. *His *knowledge results basic for him *analysis of him *operation, *design *and *construction of wools machines *and of *the teams associated the same *wools, *and in *general wools *industrial *applications in that they are used.			

Competencies	
Code	
B2	CG-02: Capacidade para comprender os seguintes fundamentos necesarios para o desenvolvemento da actividade profesional: Físicos.
B30	CG-30: Coñecementos das seguintes materias necesarios tanto para a xestión dos sistemas forestais como para a súa conservación: maquinaria e mecanización.
C20	(*)CE-20: Capacidade para coñecer, comprender e utilizar os principios de: maquinaria e mecanización forestais.
D1	(*)CBI 1: Capacidade de análise e síntese.
D5	(*)CBI 5: Capacidade de xestión da información.
D13	(*)CBS 1: Aprendizaxe autónoma.

Learning outcomes			
Expected results from this subject	Training and Learning Results		
	B2 B30	C20	D1 D5 D13
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/19%20%20Machinery.*Pdf#**overlay-**context=are/**content/competitions-*and-resulted-of-*learning-by-matter			

Contents	
Topic	
1. Thermal machines. Generalities	Classification, theoretical appearances and principles of operation. Types of engines employed in forest machines.
2. Study of Thermal Engines	Engines of lit caused. Engines of lit by compression.
3. Study of compressors	Types of compressors. Installations of compression of air and pneumatic circuit.
4. Machinery used in forestry explotatrions.	Types of machines. Hydraulic circuits. Bombs and hydraulic engines
5. Machinery used in forestry industries	Installations and circuits

Planning

	Class hours	Hours outside the classroom	Total hours
Master Session	29	86	115
Presentations / exhibitions	2	10	12
Laboratory practises	14	6	20
Multiple choice tests	1	0	1
Troubleshooting and / or exercises	2	0	2

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

Methodologies

	Description
Master Session	Exhibition by part of the professor of the contents of the matter object of study. Resolution of problems and/or exercises related with the *asignatura
Presentations / exhibitions	Realisation of works in groups on thematic specific and presentation of the same in the classroom
Laboratory practises	Work with real machines in the laboratory to complement the contents of the matter, completed with some practice with specific software. Preparation of memories of practices.

Personalized attention

Methodologies	Description
Master Session	
Laboratory practises	
Presentations / exhibitions	

Assessment

	Description	Qualification	Training and Learning Results		
Master Session	Participation in the class. Proposal of **cuestions of theory justified on the content given.	0	B2 B30	C20	
Presentations / exhibitions	Realisation of works on the content of the **asignatura. Exhibition in the classroom.	20	B2 B30	C20	D1 D5 D13
Laboratory practises	Realisation of practices of laboratory and delivery of memories on the same.	20	B2	C20	D1 D5 D13
Multiple choice tests	Resolution of questionnaire of theory type test.	25	B2 B30	C20	D1 D5
Troubleshooting and / or exercises	Resolution of problems and/or exercises related with the *temario of the **asignatura.	35	B2 B30	C20	D1 D5

Other comments on the Evaluation

Sources of information

Basic Bibliography

Complementary Bibliography

Moran J and Shapiro H, **Fundamentos de Termodinámica Técnica**, 2004,

Çengel Y. y Boles M., **Termodinámica**, 7ª edicion (2011),

Payri F. y Desantes J.M., **Motores de combustión interna alternativos**, 2011,

Agüera Soriano J., **Termodinámica Lógica y Motores Térmicos**, 1993,

Creus Solé A., **Neumática e Hidráulica**, 2010,

IDAE, **Biomasa : maquinaria agrícola y forestal**, 2007,

Recommendations

Subjects that continue the syllabus

Primary wood processing industries/P03G370V01706

Product development and innovation in the wood industry/P03G370V01708

Subjects that it is recommended to have taken before

Physics: Physics I/P03G370V01102

Physics: Physics II/P03G370V01202

Mathematics: Mathematics and IT/P03G370V01103