Universida_{de}Vigo

Subject Guide 2018 / 2019

IDENTIFYIN				
	ervation and drying technology			
Subject	Wood preservation			
	and drying			
	technology			
Code	P03G370V01705			
Study	(*)Grao en			
programme	Enxeñaría Forestal			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	4th	1st
Teaching	Spanish			
language	Galician			
Department	Natural Resources and Environment Engineering	,		
Coordinator	González Prieto, Óscar			
Lecturers	González Prieto, Óscar			
E-mail	oscargprieto@uvigo.es			
Web	http://www.forestales.uvigo.es			
General description	(*)Asignatura que trata las dos tecnologías básicas p	oara el uso indust	rial de la madera	

Competencies

- B11 Ability to characterize the anatomical and technological properties of wood and non-timber forest raw materials, as well as the technologies and industries of these raw materials.
- C31 Knowledge for the calculation and design of carpentry facilities. Drying, debarking and crushing of wood.
 D5 Capacity for information management, analysis and synthesis
- D6 Organization and planning capacity
- D8 Ability to solve problems, critical reasoning and decision making

Learning outcomes				
Expected results from this subject Training and Learning Results			Results	
New	B11	C31	D5	
			D6	
			D8	

Contents		
Topic		
Technology of wood conservation Pathologies of Natural wood durability and impregnability		
wood	Types of wood use	
	Protective products and application systems	
	Protector application systems	
	Treatments of wood different from the use of chemicals	
	Wood treatment - sawmills, joinery and carpentry	
	Technical report on pathology	
	Constructive measures for the protection of wood	
	Reinforcement of wooden structures	

Wood drying technology

Physical principles of drying

Natural drying Artificial drying

Phases of artificial drying

Predecaderos Drying tunnels Drying Chambers

Drying of wood by special methods

Defects caused by drying

Programming of drying processes

Design of dryers

Planning			
	Class hours	Hours outside the classroom	Total hours
Lecturing	28	80	108
Problem solving	8	18	26
Studies excursion	4	6	10
Laboratory practices	2	0	2
Introductory activities	1	0	1
Short answer tests	2	0	2
Problem solving	1	0	1

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

Methodologies	
	Description
Lecturing	Exposition of objectives and contents and relevance of the same within the set of competences of the subject
Problem solving	Type and oral presentation problem solving seminars
Studies excursion	Explanation "in situ" of industrial processes of drying and conservation of wood
Laboratory practices	Explanation of the handling of dryers
Introductory activities	Presentation of the objectives and development of the subject

Personalized attention				
Methodologies	Description			
Problem solving				
Laboratory practices				

Assessment			
	Description	Qualification	Training and Learning Results
Lecturing	(*)Evaluación continua a través de la asistencia a las sesiones impartidas	10	
Problem solving	(*)Evaluación continua a través de la asistencia a las clases prácticas impartidas	10	
Studies excursion	(*)Presentación de una memoria de las visitas realizadas	5	
Short answer test	s(*)Evaluación de la prueba de evaluación sobre los contenidos teóricos de la asignatura	55	
Problem solving	(*)Evaluación de las pruebas de realización de ejercicios	20	

Other comments on the Evaluation

Basic Bibliography

Complementary Bibliography

Oscar González-Prieto, Patoloxía da Madeira Estrutural, Xunta,

F. Arriaga, Intervención en estructuras de madera, AITIM,

Fernando Peraza, Protección Preventiva de la Madera, AITIM,

J.I. Fernández-Golfín Seco, Manual de secado de La Madera, AITIM,

León M. Fiske, Manual del Secado de Maderas, Muni Prensa,

Recommendations

Subjects that continue the syllabus

Quality control and prevention of occupational hazards in the forestry industry/P03G370V01804

Subjects that are recommended to be taken simultaneously

Primary wood processing industries/P03G370V01706
Industrial organisation and processes in the wood industry/P03G370V01707

Subjects that it is recommended to have taken before

Wood technology/P03G370V01606