Universida_{de}Vigo

Subject Guide 2019 / 2020

IDENTIFYIN					
Wood techr					
Subject	Wood technology				
Code	P03G370V01606				
Study	(*)Grao en				
programme	Enxeñaría Forestal				
Descriptors	ECTS Credits		Choose	Year	Quadmester
	6	,	Optional	3rd	2nd
Teaching	Spanish				
language	Galician				
Department		,			
Coordinator	González Prieto, Óscar				
Lecturers	González Prieto, Óscar				
E-mail	oscargprieto@uvigo.es				
Web	http://www.forestales.uvigo.e	es			
General	*Asignatura In which it studie	es the wood like industr	rial prime matter, hi	s characterist	ics and properties
description	-		•		• •

Competencies

Code

- 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.
- C28 Ability to know, understand and use the principles of: internal anatomical structure and macroscopic properties of wood.
- D4 Sustainability and environmental commitment

Learning outcomes

Expected results from this subject

Training and Learning Results

2R. 2018 Knowledge and understanding of the disciplines of engineering of the his speciality, to B11 C28 D4 the necessary level to purchase the rest of the competitions of the qualifications, including notions of the last advances.

3R. 2018 Be conscious of the multidisciplinary context of the engineering.

6R. 2018 Capacity to project, design and develop complex products (pieces, component, products finished, etc.), processes and systems of the his speciality, that fulfil the requirements established, including the knowledge of the social aspects, of health and environmental security, economic and industrial; as well as select and apply methods of appropriate project.

7R. 2018 Capacity of the project using any knowledges advanced of the his speciality in engineering.

8R. 2018 Capacity to realize bibliographic researches, consult and use databases and other sources of information with discretion, to realize @simulación and analysis with the objective to realize investigations on technical subjects of the his speciality.

9R. 2018 Capacity to consult and apply codes of good practices and security of the his speciality. 13R. 2018 Knowledge of the application of materials, teams and tools, technological processes and of engineering and his limitations within the scope of the his speciality.

14R. 2018 Capacity to apply norms of engineering in the his speciality.

17R. 2018 Capacity to collect and interpret data and handle complex concepts inside the his speciality, to issue judgements that involve a reflection on ethical and social questions

Contents Topic Macroscopic structure of the wood Albura, heartwood, marrow longitudinal and radial Fabrics Growth in rings Anisotropy of the wood Texture, grain and design

Microscopic structure of the wood	Microscopic structure of the wood of coniferous	
·	microscopic Structure of the wood of leafy	
Structure submicroscopic	Submicroscopic structure	
	Chemical composition of the wood	
Anomalies and defects of the wood	Knots	
	juvenile Wood	
	Anomalies of the growth of the layer cambial	
	Fends	
	Wood of reaction	
	internal Tensions of growth	
	Stock exchanges of resin	
	Other defects of the wood	
Properties of the wood	Physical properties of the wood	
	mechanical Properties of the wood	
Industrial classification of the wood in roll	Classification in function of the characteristics of the wood and his	
	aptitude for the different industrial applications	

Planning			
	Class hours	Hours outside the classroom	Total hours
Lecturing	29	72	101
Laboratory practical	10	20	30
Studies excursion	4	8	12
Introductory activities	1	0	1
Problem and/or exercise solving	2	0	2
Practices report	0	4	4

^{*}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 of aims and contents and importance of the same inside the group of competitions of the subject.
Laboratory practical	Realisation and individual presentation and in groups of works of laboratory
Studies excursion	Explanation in situ of industrial and technical processes of laboratory
Introductory activities	Initial explanation of the aims and development of the subject.

Personalized assistance	
Methodologies	Description
Laboratory practical	

Assessment			
	Description	Qualification	Training and Learning Results
Lecturing		20	
-	Continuous evaluation through the assistance to the classes of classroom		
Laboratory practical	Continuous evaluation through the assistance to the practices of laboratory	5	
Problem and/or exercise solving	Realisation of partial proofs and finals	70	
Practices report	Realisation and presentation of the memories of the practices of laboratory	5	

Other comments on the Evaluation

Exam calendar:

First Call: June 3, 2020, 4:00 p.m. Second Call: June 6, 2020, 12:00 a.m.

Publication of notes by official methods.

Sources of information

Basic Bibliography

Complementary Bibliography
Santiago Vignote Peña, TECNOLOGIA DE LA MADERA (3ª ED.), Muni Prensa,

Recommendations

Subjects that continue the syllabus

Primary wood processing industries/P03G370V01706 Wood preservation and drying technology/P03G370V01705

Subjects that it is recommended to have taken before

Physics: Physics I/P03G370V01102 Physics: Physics II/P03G370V01202

Botany/P03G370V01303