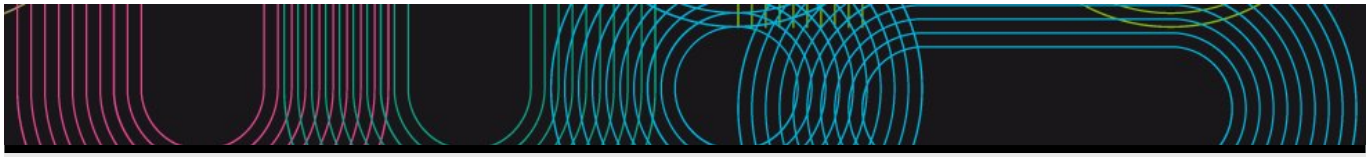

IDENTIFYING DATA				
Use of forests				
Subject	Use of forests			
Code	P03G370V01601			
Study programme	Grado en Ingeniería Forestal			
Descriptors	ECTS Credits	Type	Year	Quadmester
	6	Mandatory	3rd	2nd
Teaching language	Spanish			
Department				
Coordinator	Ortiz Torres, Luis			
Lecturers	Ortiz Torres, Luis			
E-mail	lortiz@uvigo.es			
Web	http://http://dasometriaweb.blogspot.com.es/			
General description	(*)Se analizarán los fundamentos básicos de los aprovechamientos forestales madereros para aprender su planificación básica. Asimismo se estudiarán los principales sistemas de aprovechamiento usados en Galicia así como sus rendimientos, costes y normas de seguridad. En la enseñanza de la materia, tres aspectos son fundamentales a desarrollar, según nuestro punto de vista, en la enseñanza de la ciencia forestal: intuición, rigor y creación. La intuición ubica al alumno en el tipo de problemas que se quiere atacar (a través de ejemplos), crea una perspectiva (a menudo a través de la propia historia del problema) y en definitiva genera un interés. El segundo nivel formaliza todas esas intuiciones y las despoja de lo accesorio hasta desentrañar lo esencial. El rigor necesita de la abstracción y es fundamental en la transmisión de conocimientos técnicos. La creación permite construir soluciones propias, prácticas, cuanto antes tenga un contacto forestal y más aprenda de ello, más motivado va a continuar el estudio de la asignatura.			

Skills	
Code	
CG1	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.
CG6	Ability to measure, inventory and evaluate forest resources, apply and develop silvicultural techniques and management of all types of forest systems, parks and recreational areas, as well as techniques for harvesting timber and non-timber forest products
CE23	Ability to know, understand and use the principles of forest exploitation and supply of raw materials in the forest industry.
CT4	Sustainability and environmental commitment
CT5	Capacity for information management, analysis and synthesis
CT6	Organization and planning capacity
CT8	Ability to solve problems, critical reasoning and decision making
CT10	Autonomous Learning

Learning outcomes	
Learning outcomes	Competences

2R. 2018 Knowledge and understanding of the disciplines of engineering of the his speciality, to the necessary level to purchase the rest of the competitions of the qualifications, including notions of the last advances. 4R. 2018 Capacity to #analyze products, processes and complex systems in the his field of study; choose and apply analytical methods, of calculation and experimental *relevantes of form *relevante and interpret correctly the results of these analyses. 5R. 2018 Capacity to identify, formulate and resolve problems of engineering in the his speciality; choose and apply analytical methods, of calculation and experiments properly established; Recognize the importance of the social restrictions, of health and security, environmental, economic and industrial. 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. 9R. 2018 Capacity to consult and apply codes of good practices and security of the his speciality. 11R. 2018 Understanding of the techniques and methods of analysis, project and applicable investigation and his limitations within the scope of the his speciality. 12R. 2018 practical Competition to resolve complex problems, realize complex projects of engineering and realize specific investigations stop 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. 15R. 2018 Knowledge of the social implications, of health and security, environmental, economic and @industrial of the practice in engineering. 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 20R. 2018 Capacity to work effectively in national and international contexts, individually and in team, and cooperate with the engineers and people of other disciplines.	CG1 CG6	CE23	CT4 CT5 CT6 CT8 CT10

Contents	
Topic	
General information on forestry and its market in the world	Definition and types of use The Forest Products Market The demanada and the companies The supply of forest products in the world
Marketing of wood	Main procedures for the sale and sale of wood Auction and drafting
Techniques, means and procedures of logging	Wood felling and processing Manual tools The chainsaw and other portable machines Automotive Fodder and Processing Machinery Waste treatment machinery (chippers and balers) Pull out of the wood (skider and autoloader) Adapted agricultural tractor Unblocking cables, helicopter and other methods Transport of wood (river, rail, sea and land) Parks for wood storage
Timber harvesting planning	Factors influencing planning Main systems of exploitation Organization of the uses Control systems in the harvests
Prevention of occupational hazards in forestry	The risk assessment Loss in the forestry sector
The environmental impact of harvesting	Main impacts of forestry activity Methodological guide
The use of bark	Cork Ecology The cork market
The use of resins	The use of resins The resin market

Planning			
	Class hours	Hours outside the classroom	Total hours
Lecturing	26	63	89
Problem solving	3	11	14

Case studies	6	6	12
Studies excursion	16	18	34
Problem and/or exercise 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	Presentation by the teacher of the contents on the subject under study, theoretical and / or guidelines for a job, exercise or project to be developed by the student.
Problem solving	Activity which formulated problem and / or exercises related to the course. The student should develop appropriate solutions or right through the exercise routines, application of formulas or algorithms, application processing procedures available information and interpretation of the results. It is often used to complement the lecture.
Case studies	Analysis of an event, issue or actual event in order to know, interpret, solve, generate hypotheses, comparing data, reflect, complete knowledge, diagnose and training in alternative dispute resolution procedures.
Studies excursion	Activities application of knowledge to specific situations and basic skills acquisition and related procedural matter under study. They thrive in nonacademic outdoor spaces. Among them we can cite practical field visits to events, research centers, companies, institutions ... academic-professional interest to the student.

Personalized assistance

Methodologies	Description
Problem solving	It is a question of performing a practical work corresponding to a gap in the topics included in the agenda and publicly presenting said work.
Studies excursion	It is a series of practical visits to facilities and mountains

Assessment

	Description	Qualification	Evaluated Competencess
Lecturing	Attendance and performance dedicated to the classes of the subject. The basic competences CB1 and CB2 are evaluated, the general ones CG8, CG18, CG23, CG38, CG39, CG40 and CG41, the specific ones CE23 (CE 23.1 to 23.10) and the transversal ones CBI1, CBI2, CBI4, CBI5, CBI6, CBI7, CBP4 , CBS1, CBS7.	10	CG1 CE23 CT4 CG6 CT5 CT6 CT8 CT10
Case studies	Resolution of a practical planning course that the student must carry out and deliver The basic competences CB1 and CB2 are evaluated, the general ones CG8, CG18, CG23, CG38, CG39, CG40 and CG41, the specific ones CE23 (CE 23.1 to 23.10) and the transversal ones CBI1, CBI2, CBI4, CBI5, CBI6, CBI7, CBP4 , CBS1, CBS7.	20	CT5 CT6
Studies excursion	Assistance to organized outings and field practice.	10	CT4 CT5 CT6 CT8 CT10
Problem and/or exercise solving	Answer to questions related to the topic The basic competences CB1 and CB2 are evaluated, the general ones CG8, CG18, CG23, CG38, CG39, CG40 and CG41, the specific ones CE23 (CE 23.1 to 23.10) and the transversal ones CBI1, CBI2, CBI4, CBI5, CBI6, CBI7, CBP4 , CBS1, CBS7.	60	CT6

Other comments on the Evaluation

The student must pass the practical part and the theoretical part separately.
The exam dates are available on the School website (official calls)

Sources of information

Basic Bibliography

Complementary Bibliography

TOLOSANA, E. et al, **El aprovechamiento maderero**, Ediciones Mundi-Prensa,

DALLA-PRIA, E et al, **Manuel d´exploitation forestière. Tome I.et II**, CTBA y ARMEF,

MONTOYA, J. M., **Los alcornocales**, M.A.P.A. Madrid,

ZAMORANO, J. L, **Resinar de forma rentable**, I.N.I.A. Madrid,

ACEMM, **Manual de prevención de riesgos laborales en el sector forestal**, Fundación para la prevención de riesgos laborales. Gobierno de Cantabria,
AAEF, **Manual de prevención de riesgos laborales en el sector forestal**, Junta de Andalucía,

Recommendations

Subjects that continue the syllabus

Forestry machinery/P03G370V01502

Subjects that are recommended to be taken simultaneously

Dasometry/P03G370V01602

Subjects that it is recommended to have taken before

Forestry/P03G370V01401