



IDENTIFYING DATA

Forest management

Subject	Forest management			
Code	P03G370V01605			
Study programme	(*)Grao en Enxeñaría Forestal			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	3rd	2nd
Teaching language	Spanish Galician			
Department				
Coordinator	Fernández Alonso, José María			
Lecturers	Fernández Alonso, José María			
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Web				
General description	During it study of #Ordination of Hills will #analyze the different methods stop the organisation and management of the *aproveitamento of the forest natural resources. The education will base in the *repaso of the European forest history and of the parallel evolution of the methods of #ordination. The presentation of problems will allow to enter the distinct solutions and the learning of the same by part of the student.			

Competencies

Code	
B6	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
B10	Ability to apply the techniques of forest management and land planning, as well as the criteria and indicators of sustainable forest management within the framework of forest certification procedures.
B13	Ability to design, direct, elaborate, implement and interpret projects and plans, as well as to write technical reports, recognition reports, assessments, appraisals and appraisals.
C24	Ability to know, understand and use the principles of: dasometry and forest inventory, forest management.
C25	Ability to know, understand and use the principles of: forest legislation and certification; sociology and forestry policy.
D4	Sustainability and environmental commitment
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
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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.	B6 B10 B13	C24 C25	D4 D6 D8
3R. 2018 Be conscious of the multidisciplinary context of the engineering.			
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.			
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.			
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.			
16R. 2018 general Ideas on economic questions, organisational and of management (how management of projects, management of risks and change) in the industrial and entrepreneurial context.			
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			
18R. 2018 Capacity to manage activities or technical projects or complex professionals of the his speciality, assuming the responsibility of the takes of decisions.			
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.			

Contents

Topic	
Introduction to the #Ordination of Hills	Definitions and concept Conditions and objective minima historical Evolution of the hills and of the Objective #ordination of the Forest Management
Strategic and legislative frame of the *planificación forest	Planning: international agreements, state and autonomic plans Legislation basic and complementary. Decrees Instructions of #ordination
Content of the instruments of #ordination	Classical structure of a *P.The Typology of instruments minimum Contents
Bases *selvicolas of the #ordination of hills	Relation with the minimum objectives Studio *estático of the hills dynamic Studio of the hills global Structures and conceptual base
Economic bases of the #ordination of hills	Criteria stop the determination of the turn, age of maturity or diameter of *cortabilidade technical Criteria, physical or financial
Methods of #Ordination	Introduction to the practical methods Division by fit Methods of stretches irregular Masses Management by *rodais
Certification of the forest management	Process, diagrams and modalities

Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	26	52	78
Problem solving	4	10	14
Case studies	6	12	18
Scientific events	4	6	10
Studies excursion	10	18	28
Problem and/or exercise solving	1	0	1
Report of practices, practicum and external practices 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

Methodologies	Description
Lecturing	Exhibition by part of the professor of the contained envelope to subject object of study, theoretical bases and/or guidelines of one work, exercise or project to develop pole student.
Problem solving	Activity in the that formulate problems and/or exercises related with the subject. The student owes to develop the suitable or correct solutions by means of it *ejercitación of routines, the application of formulas or algorithms, the application of procedures of transformation of the available information and the interpretation of the resulted. It usually employ how supplement of the lesson *maxistral.
Case studies	Analysis of a done, problem or real event with the aim to know it, interpreted, resolved, generate hypothesis, contrast data, *reflexionar, complete knowledges, diagnosed and trained in alternative procedures of solution.
Scientific events	Conferences, talks, exhibitions, round tables, debates... Realized by settings of prestige, that allow *afondar or supplement the contents of the subject.
Studies excursion	Activities of application of the knowledges to concrete situations and of acquisition of basic skills and *procedimentais related with the subject object of study. They develop in spaces no academic outsides. It go in they can be quoted practices of field, visits to events, centres of investigation, companies, institutions... Of academic interest-professional stop the student.

Personalized assistance

Methodologies	Description
Problem solving	
Studies excursion	

Assessment

	Description	Qualification	Training and Learning Results
Problem and/or exercise solving	Evaluation by means of proof of theoretical concepts	60	B6
Report of practices, practicum and external practices	Continuous evaluation of the individual work. Resolution put student of practical cases and manufacture of report on case of study	40	B6

Other comments on the Evaluation

Sources of information

Basic Bibliography

MADRIGAL, A, **Ordenación de Montes Arbolados**, ICONA,

Complementary Bibliography

GONZALEZ MOLINA, et al., **Manual de Ordenación por Rodales**, Centre Tecnologic Forestal de Catalunya,

DAVIS, L. S.; JOHNSON, K. N.; BETTINGER, P. S.; HOWARD, T. E, **Forest Management (4th ed.)**, McGraw Hill Publishing Co.,

MADRIGAL, A.; ÁLVAREZ, J.G.; RODRÍGUEZ, R.; ROJO, A., **Tablas de producción para los montes españoles**, Fundación Conde del Valle de Salazar,

DÍAZ-MAROTO, I., **Evolución de los métodos de ordenación de montes en España. Situación actual.**, Escuela Politécnica Superior, Lugo,

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

DIEGUEZ, U. et al., **Herramientas Selvícolas para la Gestión Forestal Sostenible en Galicia**, Xunta de Galicia,

MARTÍNEZ CHAMORRO, et al., **Manual para a cubicación, taxación e venda de madeira en pe e biomasa forestal**, Universidade de Vigo,

Manual de ordenación de montes de Andalucía, Junta de Andalucía,

Recommendations

Subjects that continue the syllabus

Physical planning and land management/P03G370V01701

Subjects that are recommended to be taken simultaneously

Projects/P03G370V01503

Subjects that it is recommended to have taken before

Mathematics: Statistics/P03G370V01301

Forestry/P03G370V01401

Use of forests/P03G370V01601

Dasometry/P03G370V01602

Contingency plan

Description

=== EXCEPTIONAL MEASURES SCHEDULED ===

In front of its uncertain and unpredictable evolution of the sanitary alert caused by the COVID-19, the University establishes joint extraordinary planning that will actuate in the moment in that the administrations and the @propio institution determine it attending to criteria of security, health and responsibility, and guaranteeing the *docencia in a @escenario no *presencial or no totally *presencial. These already scheduled measures guarantee, in the moment that was prescriptive, the development of the *docencia of a way but *áxil and effective when being known beforehand (or with a wide advance) pole students and the teaching staff through the tool normalized and institutionalized of the teaching guides DOCNE*T.

=== ADAPTATION OF THE METHODOLOGIES ===

* teaching Methodologies that keep : all except visit of studies

* teaching Methodologies that modify : the visit of studies would be deleted and *substituïda by a case of study

* Mechanism no *presencial of attention to the students (*titorías): *email, remote campus and *fàitic

* Modifications (proceed) of the contained to impart

* additional Bibliography to facilitate to car-learning

* Other modifications

=== ADAPTATION OF THE EVALUATION ===

* Proofs already realized

Test XX: [previous Weight 00%] [Weight Proposed 00%]

...

* Pending proofs that keep

Exercise final evaluation: [previous Weight 60%] [Weight Proposed 40%]

Works of continuous evaluation: [previous Weight 40%] [Weight Proposed 60%]

* Proofs that modify

[previous Proof] => [new Proof]

* New proofs

* additional Information
