



IDENTIFYING DATA

Forestry

Subject	Forestry			
Code	P03G370V01401			
Study programme	(*)Grao en Enxeñaría Forestal			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Mandatory	2nd	2nd
Teaching language	Spanish Galician			
Department				
Coordinator	Picos Martín, Juan			
Lecturers	Picos Martín, Juan Valero Gutiérrez del Olmo, Enrique María			
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Web	http://silvicultor.blogspot.com/			
General description	<p>The general aims of the *assignatura are:</p> <p>to) Know the bases, object and foundations of the *Selvicultura</p> <p>*b) Know the foundations of the *Selvicultura Static</p> <p>*c) Know the foundations of the *Selvicultura Dynamic</p> <p>*d) Know the cultural characters of the forest species</p> <p>and) That the professional future was able to analyse and interpret the mountain to be able to propose suitable treatments in each case.</p>			

Skills

Code	
B1	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.
B2	Ability to analyze the ecological structure and function of forest systems and resources, including landscapes.
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
C17	Ability to know, understand and use the principles of silviculture.
D5	Capacity for information management, analysis and synthesis
D8	Ability to solve problems, critical reasoning and decision making
D10	Autonomous Learning

Learning outcomes

Expected results from this subject	Training and Learning Results
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3R. 2018 Be conscious of the multidisciplinary context of the engineering.	B1	C17	D5
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	B2		D8
*relevante and interpret correctly the results of these analyses.	B6		D10
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.			
15R. 2018 Knowledge of the social implications, of health and security, environmental, economic and @industrial of the practice in engineering.			
19R. 2018 Capacity to communicate of effective way information, ideas, problems and solutions in the field of the engineering and with the society in general.			
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.			
21R. 2018 Capacity to recognize the need of a continuous training and realize this activity of independent way during his professional life.			
22R. 2018 Capacity to be to the day of the scientific and technological news.			

Contents

Topic	
I.- Concept and foundations of silviculture	1. Concept and classes of silviculture 2. Static study of forest stands
II.- Silvicultural Systems	3. Dynamic study of forest stands 4. Influence of ecological factors. 5. Classification of Silvicultural systems and methods 6. Clearcutting and Seed Tree system 7. Shelterwood systems 8. Selection systems 9. Tending of forest stands 10. Coppice systems 11. Transitory systems 12. Risk Mitigation and silviculture
III.- Silvics	13. silvics of the main forest species

Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	24.5	47.5	72
Problem solving	8	14	22
Studies excursion	8	8	16
Project based learning	1	11.5	12.5
Case studies	10.5	14	24.5
Objective questions exam	0.5	0	0.5
Problem and/or exercise solving	0.5	0	0.5
Case studies	1	1	2

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

Methodologies

	Description
Lecturing	Masterclasses in classroom or vía Campus Remoto (online teaching Platform)

Problem solving	Resolution of problem solving and/or exercises in classroom, laboratory or in field or via the online teaching platform (Faitic-Campus Remoto)
Studies excursion	Field Visits to Forest Management Units and to forestry works.
Project based learning	<ul style="list-style-type: none"> - Organization of seminars or specific conferences - Presentations/exhibitions: Presentations by students about an specific subject or about a personal work. - Multimedia sessions: Use od video, computer simulations or on-line materials. - Sessions about previously studied/analysed issues in the field trips
Case studies	- Study cases and guided debates: Formulation, analysis, resolution and debate of a problem or exercise.

Personalized assistance

Methodologies	Description
Case studies	
Problem solving	
Studies excursion	

Assessment

	Description	Qualification Training and Learning Results			
Lecturing	.	0	B6	C17	
Project based learning	written exam and/or summary of the activities	20	B6	C17	D5
Case studies	written exam and/or oral disertation about similar cases to those solved in class	20	B6	C17	
Objective questions exam	written exam or test about the contants of the lectures given	30	B6	C17	
Problem and/or exercise solving	written answer to those exercises suggested	30	B6	C17	

Other comments on the Evaluation

to pass the course the studant must pass the different exams and solve satisfactorily the assignments

Attendance to practical sessions and field excursions are mandatory.

Some of the tests or exams may have eliminatory character.

Sources of information

Basic Bibliography

Complementary Bibliography

Serrada, R., Montero, G. y Reque, J. Eds, **Compendio de Selvicultura Aplicada en España**, 978-84-7498-521-4, Madrid : INIA - FUCOVASA, 2008

González Molina, José María, **Introducción a la selvicultura general**, 978-84-97732239, León : Universidad, Secretariado de Publicaciones, 2005

Sociedad Española de Ciencias Forestales, **Recursos Abiertos. SECF**, http://secforestales.org/recursos_abiertos, SECF, Sevilla Martinez, Froilan, **Una Teoria ecologica para los Montes ibericos**, 978-8461248315, Inst.Restauracion Y Medio A., 2012

Serrada Hierro, Rafael, **Apuntes de Selvicultura**, https://distritoforestal.es/images/Apuntes_de_Selvicultura_completo_2011.pdf, 1ª, FuCOVaSA, 2001

Recommendations

Subjects that continue the syllabus

Use of forests/P03G370V01601

Dasometry/P03G370V01602

Forest management/P03G370V01605

Repopulation/P03G370V01603

Forest and pasture management/P03G370V01704

Subjects that are recommended to be taken simultaneously

Botany/P03G370V01303

Forestry Ecology/P03G370V01402

Subjects that it is recommended to have taken before

Contingency plan

Description

=== EXCEPTIONAL PLANNING ===

Given the uncertain and unpredictable evolution of the health alert caused by COVID-19, the University of Vigo establishes an extraordinary planning that will be activated when the administrations and the institution itself determine it, considering safety, health and responsibility criteria both in distance and blended learning. These already planned measures guarantee, at the required time, the development of teaching in a more agile and effective way, as it is known in advance (or well in advance) by the students and teachers through the standardized tool.

=== ADAPTATION OF THE METHODOLOGIES ===

** Teaching methodologies that are maintained

All methodologies but field trips are maintained. They will adapt to a non-face-to-face format using the official on-line teaching platforms.

* Teaching methodologies that are modified

In case of having to cancel field trips, they will be replaced by materials such as:

- ☐ Explanatory video pills. /
- ☐ Other recommended reading documents.
- ☐ External videos, web links, etc.

Some tasks / exercises will be proposed for evaluation. Delivery and review deadlines will be specified in each of the proposed tasks.

* Non-face-to-face service mechanism for students (tutorials)

Weekly an email will be sent to the students with instructions for the weekly session of the subject. Said email will be sent through the FAITIC platform.

A section will be opened in the FAITIC platform forum for the resolution of doubts.

Questions will be answered through email.

Tutorials can be made via the assigned room of the UVIGO REMOTE CAMPUS. For this, it is advised to send an email in advance to define day, time. These tutorials can be collective.

=== ADAPTATION OF THE EVALUATION ===

No changes will be made to the proposed evaluation system. They will only be adapted to be carried out in a on-line mode using the UVIGO Faitic-Remote Campus remote teaching platforms.
