



IDENTIFYING DATA

Use of forests

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|---------------------|--|-----------|------|------------|
| Subject | Use of forests | | | |
| Code | P03G370V01601 | | | |
| Study programme | (*)Grao en Enxeñaría Forestal | | | |
| Descriptors | ECTS Credits | Choose | Year | Quadmester |
| | 6 | Mandatory | 3rd | 2nd |
| Teaching language | Spanish | | | |
| Department | | | | |
| Coordinator | Fernández Alonso, José María | | | |
| Lecturers | Fernández Alonso, José María Ortiz Torres, Luis | | | |
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| 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.

Competencies

| | |
|------|---|
| 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. |
| 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 |
| C23 | Ability to know, understand and use the principles of forest exploitation and supply of raw materials in the forest industry. |
| D4 | Sustainability and environmental commitment |
| D5 | Capacity for information management, analysis and synthesis |
| D6 | Organization and planning capacity |
| D8 | Ability to solve problems, critical reasoning and decision making |
| D10 | Autonomous Learning |

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 the necessary level to purchase the rest of the competitions of the qualifications, including notions of the last advances. | B1 | C23 | D4 |
| 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. | B6 | | D5 D6 D8 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. | | | |
| 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. | | | |

Contents

Topic

| | |
|---|--|
| General information on forestry and its market in the world | Definition and types of use The Forest Products Market The demand 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 | 12 | 18 |
| Studies excursion | 10 | 18 | 28 |
| 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 | Training and Learning Results |
|---------------------------------|--|---------------|-------------------------------|
| Lecturing | (*)Asistencia e desempeño dedicado ás clases da materia. Se *evaluan as competencias básicas *CB1 e *CB2, as xerais *CG8, *CG18, *CG23, *CG38, *CG39, *CG40 e *CG41, a específicas CE23 (CE 23.1 a 23.10) e as transversais *CBI1, *CBI2, *CBI4, *CBI5, *CBI6, *CBI7, *CBP4, *CBS1, *CBS7. | 10 | |
| Case studies | (*)Resolución dun suposto práctico de planificación que o alumno deberá realizar e entregar Se *evaluan as competencias básicas *CB1 e *CB2, as xerais *CG8, *CG18, *CG23, *CG38, *CG39, *CG40 e *CG41, a específicas CE23 (CE 23.1 a 23.10) e as transversais *CBI1, *CBI2, *CBI4, *CBI5, *CBI6, *CBI7, *CBP4, *CBS1, *CBS7. | 20 | D5 D6 |
| Studies excursion | (*)Asistencia ás saídas e práctica de campo organizadas. | 10 | |
| Problem and/or exercise solving | (*)Resposta a preguntas relacionadas co temario Se *evaluan as competencias básicas *CB1 e *CB2, as xerais *CG8, *CG18, *CG23, *CG38, *CG39, *CG40 e *CG41, a específicas CE23 (CE 23.1 a 23.10) e as transversais *CBI1, *CBI2, *CBI4, *CBI5, *CBI6, *CBI7, *CBP4, *CBS1, *CBS7. | 60 | D6 |

Other comments on the Evaluation

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,
MONTROYA, 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

Subjects that are recommended to be taken simultaneously

Dasometry/P03G370V01602

Subjects that it is recommended to have taken before

Forestry/P03G370V01401

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 on line

Use of institutional on-line teaching platform Campus Remoto in a synchronous way for the theoretical classes including basics, foundations, as well as general guidelines for resolution of problems and practical cases. Specific didactic materials adapted for on line teaching will be prepared e.g. Video or presentations, graphic resources, software, etc. All the resources will be available through FAITIC platform.

* Mechanism face-to-face of attention to the students (tutorials)

Personalized attention. Communication by email or another on-line tool. Tutorials via Campus Remoto platform.

=== ADAPTATION OF The EVALUATION ===

On-line tests and tasks via Campus Remoto and Faitic. The weight of the tests will be maintained as they are described in the main guide.
