



IDENTIFYING DATA

Forestry

| | | | | |
|---------------------|---|-----------|------|------------|
| Subject | Forestry | | | |
| Code | P03G370V01401 | | | |
| Study programme | Grado en Ingeniería Forestal | | | |
| Descriptors | ECTS Credits | Choose | Year | Quadmester |
| | 6 | Mandatory | 2nd | 2nd |
| Teaching language | Spanish Galician | | | |
| Department | | | | |
| Coordinator | Picos Martín, Juan | | | |
| Lecturers | Picos Martín, Juan | | | |
| E-mail | jpicos@uvigo.es | | | |
| Web | http://silvicultor.blogspot.com/ | | | |
| General description | <p>The general aims of the *asignatura 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> | | | |

Training and Learning Results

| | |
|------|---|
| 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 |

Expected results from this subject

| | |
|------------------------------------|-------------------------------|
| Expected results from this subject | Training and Learning Results |
|------------------------------------|-------------------------------|

| | | | |
|--|----|-----|-----|
| 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) |

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|------------------------|---|
| 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 subject, you will have to pass the ordinary exams and the assignments/exercises that may be assigned

The exams in each call will include a test-type test that can be eliminatory, and passing it is mandatory to access the rest of the assessment.

Attendance at practices and trips is mandatory for continuous evaluation. In the case of waiving it and requesting a global assessment, there will be an additional test that can be written or oral.

Classifications of theoretical notes will not be saved, beyond the regular calls of the academic year.

The official dates and possible changes are displayed on the official EE Forestal board and on the website <http://forestaes.uvigo.es/gl/>

Sources of information

Basic Bibliography

Complementary Bibliography

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

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

Sociedad Española de Ciencias Forestales, **Recursos Abiertos. SECF**, SECF,

Sevilla Martinez, Froilan, **Una Teoría ecológica para los Montes ibéricos**, Inst.Restauracion Y Medio A., 2012

Serrada Hierro, Rafael, **Apuntes de Selvicultura**, 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

Biology: Plant Biology/P03G370V01201
