# Universida<sub>de</sub>Vigo

Subject Guide 2023 / 2024

| IDENTIFYIN              | <del>-</del>                                |          |          |      |            |
|-------------------------|---|----------|----------|------|------------|
| Physical pla<br>Subject | nning and land management Physical planning | <u>:</u> |          |      |            |
| <b>,</b>                | and land                                    |          |          |      |            |
|                         | management                                  |          |          |      |            |
| Code                    | P03G370V01701                               |          |          |      |            |
| Study                   | Grado en                                    |          |          |      |            |
| programme               | Ingeniería Forestal                         |          |          |      |            |
| Descriptors             | ECTS Credits                                |          | Choose   | Year | Quadmester |
|                         | 6   |          | Optional | 4th  | <u>1st</u> |
| Teaching                | Spanish                                     |          |          |      |            |
| language                | Galician                                    |          |          |      |            |
| Department              |   |          |          |      |            |
| Coordinator             | Fernández Alonso, José María                |          |          |      |            |
| Lecturers               | Fernández Alonso, José María                |          |          |      |            |
|                         | Rodríguez Somoza, Juan Luis                 |          |          |      |            |
| E-mail                  | josemfernandez@uvigo.es                     |          |          |      |            |
| Web                     |   |          |          |      |            |
| General                 |   |          |          |      |            |
| description             |   |          |          |      |            |

### **Training and Learning Results**

Code

- 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.
- 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.
- C32 Ability to know, understand and use the principles of: planning and planning of the territory. Forest landscaping.
- D4 Sustainability and environmental commitment
- D5 Capacity for information management, analysis and synthesis
- D6 Organization and planning capacity
- D7 Skill in the use of IT tools and ICTs.
- D8 Ability to solve problems, critical reasoning and decision making
- D9 Teamwork skills, skills in interpersonal relationships and leadership.
- D10 Autonomous Learning

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

| 2R. 2018 Knowledge and understanding of the disciplines of engineering of the his speciality, to      | RT  | C32 | D4  |
|---|-----|-----|-----|
| the necessary level to purchase the rest of the competitions of the qualifications, including notions | B2  |     | D5  |
| of the last advances.   | B10 |     | D6  |
| 3R. 2018 Be conscious of the multidisciplinary context of the engineering.                            |     |     | D7  |
| 4R. 2018 Capacity to #analyze products, processes and complex systems in the his field of study;      |     |     | D8  |
| choose and apply analytical methods, of calculation and experimental *relevantes of form              |     |     | D9  |
| *relevante and interpret correctly the results of these analyses.                                     |     |     | 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.

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.

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.

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.

| Topic   |   |
|---|---|
|   | Concept of Physical Planning.                   |
| Topic I: GENERAL THEORY OF PLAN. PHYSICS                    | Physical Planning in Engineering                |
|   | Background of Physical Planning                 |
|   | Environmental and integrated inventories        |
|   | Evolution of Physical Planning studies          |
|   | Definitions of Physical Planning                |
|   | Ecologically based physical planning            |
| Topic II: PHYSICAL PLANNING PROCESS                         | Typology and Purposes of Planning               |
|   | Operational techniques                          |
|   | Levels of application                           |
|   | Fundamental relationships                       |
|   | General scheme                                  |
|   | Definition of objectives                        |
|   | Inventory                                       |
|   | Modeling  |
|   | Spatial classification                          |
|   | Choice of Alternatives                          |
|   | Decision making                                 |
|   | Contrast of Planning                            |
|   | Planning follow-up                              |
| Topic III: THE TOOLS FOR PHYSICAL PLANNING                  | Introduction to Geographic Information Systems. |
| The S.I.G. Applied to Physical Planning and Territorial Pla |   |

|                          | Class hours | Hours outside the classroom | Total hours |
|--------------------------|-------------|-----------------------------|-------------|
| Mentored work            | 0           | 30                          | 30          |
| Presentation             | 25          | 30                          | 55          |
| Case studies             | 21          | 23                          | 44          |
| Objective questions exam | 1           | 0                           | 1           |
| Essay                    | 0           | 20                          | 20          |

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

| Methodologies |   |
|---------------|---|
|               | Description   |
| Mentored work | The student, individually or in groups, prepares a paper on the subject of matter or prepare seminars, research, memoirs, essays, summaries of readings, lectures, etc Generally it is an autonomous activity / of the student / s that includes finding and collecting information, reading and literature management, writing |
| Presentation  | Exhibition by the students to the teacher and / or a group of students of a subject matter or content of the results of a job, exercise, project It can be done individually or in groups.  |
| 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.   |

## Personalized assistance

#### **Methodologies Description**

Mentored work Tutoring sessions will be given to students for the correct development of the final work of the subject

| Assessment   |   |               |  |
|--------------|---|---------------|--|
|              | Description   | Qualification | Training<br>and<br>Learning<br>Results |
| Mentored wor | kThe student by himself alone or in groups of two people will owe to elaborate and draft a technical preliminary draft, what will constitute the central axis of the subject in function of the knowledges that go purchasing in the theoretical classes. This work will have character semiprofesional and preferably will be made on a real case. |               |  |
| Presentation | It will constitute the initial development of the subject, not to limiting to mere exhibitions by part of the professor, but doing them to participate as well as one tests/examination at the end  | 40            |  |
| Case studies | (*).  | 20            |  |

## Other comments on the Evaluation

The official dates and possible changes are displayed on the official EE Forestal board and on the website  $\frac{1}{100} \frac{1}{100} \frac{1}{10$ 

Those students who renounce the continuous assessment must submit to a specific additional test

| Sources of information     |
|----------------------------|
| Basic Bibliography         |
| Complementary Bibliography |
|                            |

#### Recommendations