

Degree	Type	Year
2503710 Geography, Environmental Management and Spatial Planning	OT	4

## Contact

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## Teachers

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## Teaching groups languages

You can view this information at the [end](#) of this document.

## Prerequisites

It is highly recommended to have taken and passed most of the compulsory Physical Geography subjects of the degree.

## Objectives and Contextualisation

- To gain knowledge of the entire process of drafting a real technical project, from the collection of field data to the final delivery, including interaction with stakeholders in the territory, data management and GIS analysis.
- To provide a solid base in the analysis and drafting of territorial planning and management projects through the collection of real quantitative data (in the field) and qualitative data (agents involved in the territory).
- To provide practical experience in the analysis and preparation of a Forest Management Project that will enable students to work in interdisciplinary teams in the fields of geographical analysis, planning and land management.
- Acquire tools to plan and collaborate effectively in work teams and to manage time and tasks correctly until the final presentation of the project.
- Develop critical thinking skills and achieve decision-making capacity in territorial management.
- To consolidate knowledge and basic GIS tools for the analysis and drafting of territorial projects.
- The most important objective of this course is to have fun learning.

## Learning Outcomes

1. CM25 (Competence) Carry out a basic research project introducing qualitative methodologies: defining the problem, selecting the method, collecting information, and analysing the material using coding systems and internal analysis.
2. CM26 (Competence) Interpret the statistical results obtained in a study through data analysis in order to make judgements that include a reflection on relevant social, scientific or ethical issues.
3. KM40 (Knowledge) Introduce the main sources of scientific information and documentation related to territorial and environmental processes in a study.
4. SM33 (Skill) Apply the methods and techniques of qualitative analysis and fieldwork in the interpretation of spatial and environmental processes.
5. SM34 (Skill) Correctly apply basic and multivariate statistical methods in a practical case.

## Content

- Approximation to the status and use of current forests
- Ruralism and needs of mountain territories
- Forest evolution, natural status and social status
- Forests and climate change
- Principles of sustainable forest management
- Forest inventory: Current situation of the forest, ownership and protection status, nature, legal status, probable evolution and productive capacity of all types of forest goods.
- Collection of field data and synchronization with GIS project
- Planning of fire prevention measures in public forests
- Use of measurement tools for forest inventory: height, density, age, diameter, growth, etc.
- Knowledge and identification of the main tree, shrub, herbaceous and fauna species of the forest and silvopastoral ecosystem.
- Compatibility of uses in a forest: pastures, wood production, biomass, public use, community use, biodiversity management.
- GIS analysis and cartographic representation
- Work with geo-referenced databases
- Graphical representation of the results of the proposed actions

## Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Field trip (PCAM)	17	0.68	KM40
GIS practices (PLAB)	12	0.48	SM34
Laboratory work (PLAB)	13	0.52	CM26
Theoretical sessions (TE)	8	0.32	CM25, CM26, KM40
Type: Supervised			
Doing the Forest Management Project	15	0.6	CM25, CM26, SM33, SM34
Use of forestry measurement instruments	10	0.4	SM33

Type: Autonomous

Field try preparation	20	0.8	SM34
POF writing and delivery	35	1.4	KM40, SM33
Preparation and participation in discussions	20	0.8	CM26, KM40

The purpose of this course is to learn how to write a Forest Management Project from scratch, extrapolating to any other territorial project in which as geographer/s can participate as part of multidisciplinary teams.

For the drafting of the POF, a wide range of tasks must be carried out throughout the drafting process, which will allow you to acquire the knowledge of searching for and processing information by different means.

The search for basic information will be firstly in the digital field (legal status and natural state of the forest), and also in written bibliography. GIS analysis will become an important part of the course and we will review practical and functional aspects to obtain results for the drafting of the POF. GIS tools will be used for the preparation of the field work prior to the forest inventory session, for the calculation of areas and analysis required in the final pdf document and for the graphic presentation of the FOP results.

The field work will allow you to learn about the technical tools of forest inventory, the extraction of coras for the calculation of the age of each tree and the assessment of possible actions (livestock, production, public use and biodiversity) in each area of the forest that you will know.

During the process, it will have to listen to the demands of the different agents involved in the use and management of the forest, such as rural agents, the technical staff of the Natural Park, livestock farmers, forest owners, and integrate them into the actions proposed by the technical team in the POF.

As a drafting team, they will have to make coherent and viable proposals for new actions and infrastructures according to the knowledge acquired and the capacity to discern and make judgments on the quantitative and qualitative information they have gathered.

The whole process of drafting the POF will be evaluated with deliveries throughout the course, as well as the delivery of specific tasks and the final oral presentation of the project with its own proposal for forest management for the next 10 and 20 years.

Teaching methodologies used in the degree course

- Lectures
- Classroom practices
- Discussions
- Oral presentation of papers
- Tutorials
- Field trips: Dasometry and practical measurements with forestry instruments (One or two days to be decided according to group size).
- Elaboration of work
- Reading of articles
- Laboratory practices

The methodology of this subject is practical. The field techniques at the field trip and the laboratory techniques in the realization of the protocols will be explained.

*At the beginning of the course, the teacher will explain the protocol of measures and good practices for field trips.*

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

## Assessment

## Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Drafting of the Forest Management Project	50%	0	0	KM40, SM33, SM34
Oral presentation POF and discussions	20%	0	0	CM26, KM40
Partial deliveries of results and mapping	30%	0	0	CM25, CM26, KM40

- The evaluation of this subject will be based on the delivery of a Forest Management Project document.
- Partial deliveries of the final document will be made throughout the course and will be evaluated individually.
- The preparation and participation in the debates will be evaluated.
- There is no exam
- Not evaluable implies the non-attendance to the field trip and the laboratory practices.
- At the time of carrying out each evaluation activity, the teacher will inform the students (Moodle) of the procedure and date for reviewing the grades.
- This subject does not incorporate single assessment.

## Bibliography

Sobre el món rural:

- Revista Arrels
- RURALISME (edición en catalán) VANESA FREIXA RIBA ARA LLIBRES - 9788418928888
- DONES DE LA MUNTANYA (edición en catalán) FEDERICA RAVERA POL·LEN EDICIONS - 9788418580635

Sobre boscos i gestió:

- MANUAL DE ORDENACIÓN POR RODALES Gestión multifuncional de los espacios forestales [JOSE Mª GONZALEZ MOLINA, MIRIAM PIQUÉ NICOLAU, PAU VERICAT GRAU](#)
- BOSCOS DE CATALUNYA (edición en catalán) MARTI BOADA, FRANCISCO JAVIER GOMEZ LUNWERG - 9788497859318
- MANUAL DE ORDENACIÓN POR RODALES. GESTIÓN MULTIFUNCIONAL DE LOS ESPACIOS FORESTALES ISBN: 84-8014-789-X- ISBN 13: 9788480147897
- Los bosques ibéricos, Una interpretación geobotánica- 9788408058205

Articles digitals

- Membrive, Rosa et al. El papel del pastoreo en la reducción de la carga de combustible en los bosques de la Vall d'Alinyà. N.p., 2014. Print.
- Doblas Miranda, Enrique et al. Conservar aprovechando: cómo integrar el cambio global en la gestión de los montes españoles. Bellaterra Centre de Recerca Ecològica i Aplicacions Forestals, 2013. Print.  
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- Vila Subirós, Josep, and Josep Gordi i Serrat. "La geografia i l'estudi dels boscos a Espanya." (2001): n. pag. Print.  
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- Blanco, Juan A. Usando la biomasa forestal como una fuente de energía sostenible / Juan A. Blanco (coord.). Pamplona: Universidad Pública de Navarra, 2016. Print.  
[https://bibcercador.uab.cat/permalink/34CSUC\\_UAB/1eqfv2p/alma991010518755806709](https://bibcercador.uab.cat/permalink/34CSUC_UAB/1eqfv2p/alma991010518755806709)
- Chuvieco Salinero, Emilio., and María del Pilar Marfín Isabel. Nuevas tecnologías para la estimación del riesgo de incendios forestales Editado por Emilio Chuvieco Salinero, María del Pilar Marfín Isabel. Madrid: Consejo Superior de Investigaciones Científicas, 2004. Print.  
[https://bibcercador.uab.cat/permalink/34CSUC\\_UAB/1eqfv2p/alma991010511733506709](https://bibcercador.uab.cat/permalink/34CSUC_UAB/1eqfv2p/alma991010511733506709)

## Software

Ús de programari:

- QSIG
- paquet office (lliure) calc i writer
- App Qfield
- App Catalunya offline
- App IGN
- Adobe creator reader
- SIG Miramon

## Language list

Name	Group	Language	Semester	Turn
(PCAM) Field practices	1	Catalan	first semester	morning-mixed
(PLAB) Practical laboratories	1	Catalan	first semester	morning-mixed
(TE) Theory	1	Catalan	first semester	morning-mixed