

Geographic Information Systems Applied to Planning

Code: 104274 ECTS Credits: 6

2024/2025

Degree	Туре	Year
2503710 Geography, Environmental Management and Spatial Planning	ОТ	4

Contact

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Teachers

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Teaching groups languages

You can view this information at the <u>end</u> of this document.

Prerequisites

There are no pre-requisits.

Objectives and Contextualisation

Contextualization:

This subject is taught in the Fourth Year of the Degree in Geography, En Training objectives of the subject:

Spatial planning is essentially a process where the decision-making of th determine the guidelines for the location of collective facilities, the mobilil rules for the land uses of a territory.

It is very important to know the most significant regulations to develop an territory and resources.

Previously, a basic knowledge of the methodology and procedures in the laws and regulations that are applicable in territorial or sectoral planning, Pose and solve cases of territorial planning analysis using various types strategic.

Use of geographic information at various scales, performing the process interpretation of results.

Develop self-employment

Learning Outcomes

- 1. CM27 (Competence) Use geographical information systems as a tool to obtain answers to certain questions related to geoinformation.
- 2. CM28 (Competence) Make use of GIS in the understanding of spatial, environmental, economic and social phenomena.
- 3. KM43 (Knowledge) Distinguish between the different cartographic information systems in a specific study.
- 4. SM37 (Skill) Compare different interpretations of geographical maps.
- 5. SM39 (Skill) Apply GIS for territorial planning and management from geographical and environmental viewpoints.

Content

Spatial planning models represent a synthesis, methodologically formalized, between the bases

theoretical principles on which the models of spatial analysis, the applica georeferenced data, normative-ideological and planning constraints; as v specific reflected in each plan. It is intended that the student learn the ge spatial planning model as well as some types of specific models. Special attention will be paid to the territorial planning of the strategic ser population. These are tools that provide important social and economic p they have a transversal character: they cover all types of territory and ha important in these territories.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Theoretical (TE) and GIS practical classroom (PLAB)	48	1.92	CM28, KM43, SM37, SM39
Type: Supervised			
Supervision of course work	25	1	CM27, CM28, KM43, SM37, SM39
Type: Autonomous			
Autonomous study and realization of internships and coursework	75	3	CM27, CM28, KM43, SM37, SM39

The course will be structured from directed activities and autonomous activities where the student will learn to de

The contents of the subject will be developed through the following activi

- 1) Readings and follow-up of the course material.
- 2) Reading of books and articles (individual activity of the students comp
- 3) Carrying out practical exercises in simulated scenarios based on GIS.
- 4) Final work, related to the class syllabus and the practical exercises.

The practical activity is structured in three axes:

- a. Guided and tutored practices in each of the topics.
- b. Verification of theoretical and methodological knowledge.
- c. Completion of a final project that combines the theory of the course.

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
Assigments	25	0	0	CM27, CM28, KM43, SM37, SM39
Class activity and case studies	10	0	0	CM28, KM43, SM39
Exam	35	2	0.08	CM28, SM37, SM39
Term paper	30	0	0	CM27, CM28, KM43, SM37, SM39

The assessment is continuous, therefore, in order to achieve the knowledge it is necessary to follow up throughout Written test (35%)

Internships (25%)

Course work (40%)

The final grade is based on the weighted average of the three assessme Assessment of the exam: The theoretical part will assess the relevance c Assessment of the practices: The formal aspects, the correct calculation

structured analysis AGD: Application of Teaching Guides v2.1 https://guies.uab.cat/guies_docents/admin/guia.j

in the specific case of the analyzes of the texts will value especially the capacity to extract and expose the most

Assessment of the course work: The formal aspects, the approach of the objectives, the problem and the models

the resolution of the results, their interpretation, conclusions and its public exhibition, if any.

Review of grades

At the time of carrying out each evaluation activity, the teacher will inform Recovery.

To participate in the recovery CAL:

- have previously been assessed in a set of activities whose weight is eq
- have obtained a minimum final grade of not less than 3.5 (out of 10).
- have obtained a minimum grade in the written test of 3.5 (out of 10).
- have delivered the activity within the established calendar. An activity n Not evaluable

The student will receive the grade of Not assessable as long as he has n of evaluation.

Plagiarism

In the event that the student commits any irregularity that could lead to ϵ

Avaluació única

Aquesta assignatura/mòdul no preveu el sistema d'avaluació única. Esta assignatura/módulo no prevé el sistema de evaluación única. This subject/module does not incorporate single assessment.

Bibliography

Models de Planificació Territorial

SOME REFERENCES WILL BE ADDED.

Bibliografia

Castañer, Margarida (Editora) (2012). El planejament territorial a Catalunya a inici del segle XXI. Una nova interpretació i projecció del país. Barcelona: Societat Catalana d'Ordenació del Territori.

Baum, Joel A. C. i Sorenson, Olav (Ed.) (2003). "Introduction: The strategic management of space and place" in Baum, Joel A. C. i Sorenson, Olav (Ed.) Geography and strategy. Oxford: Elsevier Sciencet Ltd. pp.: 1-21. Lee, Sang M. and Moore, Laurence J. (1975). Introduction to decision science. New York: Petrocelli Carter Inc. Pallares-Barbera, Montserrat (2003). "Geografia econòmica i localització industrial." Documents d'Anàlisi Geogràfica, 42: 171-182.

Tadelis, Steven (2012). Game theory: An introduction. New Jersey (USA): Economics Books Princeton University Press.

Eastman, Ronald (2001). "Uncertainty Management in GIS: Decision Support Tools for Effective Use of Spatial Data Resources." In: Hunsaker C.T., Goodchild Michael F., Friedl M.A., Case T.J. (Eds) Spatial Uncertainty in Ecology. Springer, New York, NY, pp. 379-390.

Schelling, Thomas. "An Essay on Bargaining." In The Strategy of Conflict. Cambridge, MA: Harvard University Press, 1960, 1980, pp. 21-52. ISBN: 0674840313.

Software

ArcGIS will be used.

Language list

Name	Group	Language	Semester	Turn
(PLAB) Practical laboratories	1	Catalan	second semester	morning-mixed
(TE) Theory	1	Catalan	second semester	morning-mixed

