

Degree	Type	Year
2500001 Management of Smart and Sustainable Cities	OT	3

Contact

Name: Antoni Durà Guimerà

Email: antoni.dura@uab.cat

Teaching groups languages

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

Prerequisites

Not described

Objectives and Contextualisation

Any human activity takes place in a physical space. This statement may seem obvious and yet we tend not to fully understand its implications. The United Nations has long recognized that the 21st century is and will be the century of cities, of urban environments where more than half of the world's population will meet. Urban environments in which one in four people lives in informal conditions, that is, in spaces that have not undergone an urbanization process (supply of basic services, such as water or energy, public facilities of education and health, access by safe, accessible and walkable streets, etc.). Urban environments that are currently responsible for 70% of CO2 emissions on a planetary scale. Urban environments that are the main focus of the challenges we have to face in the near future, and at the same time its main lever for change. Urban environments whose impact goes far beyond the recognized urban footprint.

Planning is an exercise in ordering all the elements that make up a territory. Planning that must be understood as an expression of the will of a society to organize itself in the territory it inhabits: identifying the areas to be protected or preserved for environmental, cultural, identity or economic reasons; pointing out the areas where the urban settlements meet and establishing the rules and conditions that define them; accommodating the roads, corridors and channels through which exchange flows of all kinds must occur within the system.

All these issues are the object of physical and normative planning that is specified in three modalities: regional, urban and sectoral planning.

The objectives of this course are aimed at understanding the three ways of intervening on the territory and that are specific to any exercise in spatial planning:

- **Legislate** - Introduce the main concepts, tools and content of spatial planning for both modalities: regional and urban (city).
- **Plan** - Deconstruct and analyze the process of formulation of regional and urban planning and how and by whom the decisions are taken.
- **Deploy (implementation)** - Understand the processes of approval and implementation of regional and urban planning in Catalonia mainly and in other European and Latin American realities, in general.

In short, this course is about understanding the reasoning for regional and urban planning, to become familiar with the basic concepts and elements that make them up and the instruments or technical tools used to shape and specify them. Delve into the implications of an apparently trivial statement that any human activity takes place in a physical space and, finally, contribute to build up criteria to the personal and individual position that we all have of what happens and affects our most immediate physical environment.

This knowledge will be achieved through theoretical classes, the preparation by the students of presentations related to current issues and topics (global agendas (SDG and Urban Agenda, deployment of the energy transition, new interventions in public space, etc.), and with a work on a practical case of planning process in a particular municipality.

Competences

- Analyse and model urban and regional dynamics using methodological instruments for qualitative and quantitative analysis.
- Identify and interpret social, economic, technological and sustainability challenges in different areas such as: town planning, infrastructures, mobility, urban economies, services and equipment, cultural diversity and social inequality, energy and natural resources, waste, etc.
- Measure the technological infrastructure necessary to respond to the needs of cities, understanding the interactions between technological, social and operational aspects of cities.

Learning Outcomes

1. Analyse and model processes in the field of energy, water cycle, control of atmospheric pollution and waste management, with special reference to the planning and management of those services and infrastructures necessary for this purpose.
2. Analyse urban environment from the perspective of the circular economy and sustainability.
3. Use qualitative techniques for the study, modeling and planning of energy systems (generation, transport, distribution and consumption), mobility (infrastructure and flows) and territorial planning (urban planning and policies). The techniques mentioned include the elaboration and management of structured, semi-structured and open surveys, participant observation, the study of group dynamics and the management of participation processes.
4. Use quantitative techniques for the study, modeling and planning of energy systems (generation, transport, distribution and consumption), mobility (infrastructure and flows) and territorial planning (urban planning and policies). The techniques mentioned include the use of cost-benefit analyses, monitoring, construction of transport network graphs, matrix calculation of mobility flows, preparation of planning reports and SWOT analysis.

Content

The subject's course will be taught according to the following agenda:

Block 1: Planning in Theory.

- Current context for planning: objectives, criteria, challenges and debates.
- Modalities of spatial planning:
- Regional planning: concepts, elements, criteria and instruments.
- Urban planning: concepts, elements, criteria and instruments.
- New approaches and debates: on decision-making processes (participation) and on instruments and tools.

Block 2: Planning in practice.

- From planning towards implementation (management).
- Case study:
 - Implementation of the plan (constraints and uncertainties).
 - Monitoring and evaluation.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Debates	4	0.16	
Lecture	30	1.2	
Oral presentations	12	0.48	
Type: Supervised			
Advising / Tutoring	4	0.16	
Type: Autonomous			
Readings and personal study	21	0.84	
Tasks in small groups	60	2.4	

The course aims to approach and to show simultaneously the two dimensions embedded in planning: the theoretical and the practical. To make this double look possible there would be two kinds of sessions:

- theoretical sessions, accompanied by readings that the student must prepare in advance to comment in class. This part will allow introducing a common and shared base knowledge for the whole group, a basic bibliography of reference and the state of the art of the most current debates.

- workshop sessions, based on the study of specific cases which will be announced and distributed at the beginning of the course. These cases will be presented in class by the teacher and the students - by groups of 3 - along the course to monitor and build up the final report.

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
Case study in groups	40%	4	0.16	1, 2, 3, 4
Class attending and active participation	10%	10	0.4	2

The course's final grade will essentially be based on the following three components:

- Written individual work documents *that represent 50% of the final grade.*

A maximum of 4 exercises would be proposed along the course (a summary of reading articles, a short essay regarding an ongoing debate or an issue raised in class, a small intervention on a specific concept discussed in class, etc.). Written quality, ability to concretise and synthesise arguments and argumentation capacity will be valued.

- *Group case study work that represents 40% of the final grade.*

At the beginning of the course, a case study would be proposed for each group (groups of 3 students) and an outline of the contents that will be developed and worked throughout the whole period. The presentations in class of the different parts of the research paper and the partial deliveries will build the final grade. All group members must demonstrate equal work and commitment towards the teamwork.

- *Attendance and active participation in class that represents 10% of the final grade.*

Qualification's requirements:

- a) Having passed written individual work documents with a minimum average grade of 5.
- b) Have submitted the case study work with a minimum grade of 5.

Both previous grades will not average between them to pass the subject. Therefore, you must have a minimum grade of 5 in both jobs (individual documents and case work in groups).

- c) Have participated regularly in the classes.

Grade's review:

- a) The exams and works to review the final grade would be indicated in due time.
- b) To qualify for review, you must have participated in the evaluation tests and delivered the materials of the practices in the manner that will be indicated in due time.
- c) The maximum grade that can be obtained in the review process is 5.

Bibliography

Romà Pujadas, Jaume Font; "Ordenación y planificación territorial". Editorial Síntesis.

Manuel Benabent Fernández; "Introducción a la teoría de la planificación territorial". Secretariado de Publicaciones. Universidad de Sevilla.

Juli Esteban Noguera; "Elementos de Ordenación Urbana". Edicions UPC. Universitat Politècnica de Catalunya.

Peter Hall; "Urban and Regional Planning". Routledge.

Patsy Healey; "Collaborative Planning: shaping places in Fragmented societies". Palgrave-MacMillan.

Scott Campell, Susan Fainstein (ed.); "Planning Theory". Blackwell Publishers.

Manuel de Solà-Morales; "Las formas de crecimiento urbano"; Laboratori d'urbanisme. Edicions UPC.

Oriol Clos (ed.); "Manuel de Solà-Morales. Miradas sobre la ciudad". Editorial Acantilado.

Further readings and complementary bibliography for the class debates will be proposed along the course.

Software

No es descriu

Language list

Name	Group	Language	Semester	Turn
(PAUL) Classroom practices	611	Catalan	second semester	morning-mixed
(PCAM) Field practices	611	Catalan	second semester	morning-mixed
(PCAM) Field practices	612	Catalan	second semester	morning-mixed
(TE) Theory	61	Catalan	second semester	afternoon