

## SUBJECT TEACHING GUIDE

### G1980 - Urbanism and Urban Facilities Planning Degree in Civil Engineering

Academic year 2021-2022

| 1. IDENTIFYING DATA              |   |                  |                    |                  |                    |
|----------------------------------|---|------------------|--------------------|------------------|--------------------|
| Degree                           | Degree in Civil Engineering   |                  |                    | Type and Year    | Compulsory. Year 3 |
| Faculty                          | School of civil Engineering   |                  |                    |                  |                    |
| Discipline                       | THE CITY AND URBAN SERVICES   |                  |                    |                  |                    |
| Course unit title and code       | G1980 - Urbanism and Urban Facilities Planning  |                  |                    |                  |                    |
| Number of ECTS credits allocated | 6   | Term             | Semester based (2) |                  |                    |
| Web                              | <a href="https://web.unican.es/centros/caminos/estudios/detalle-asignatura?c=G1980&amp;p=212&amp;a=2020">https://web.unican.es/centros/caminos/estudios/detalle-asignatura?c=G1980&amp;p=212&amp;a=2020</a> |                  |                    |                  |                    |
| Language of instruction          | Spanish   | English Friendly | No                 | Mode of delivery | Face-to-face       |

|                  |   |
|------------------|---|
| Department       | DPTO. TRANSPORTES Y TECNOLOGIA DE PROYECTOS Y PROCESOS                                      |
| Name of lecturer | SOLEDAD NOGUES LINARES  |
| E-mail           | soledad.nogues@unican.es  |
| Office           | E.T.S. de Ingenieros de Caminos, Canales y Puertos. Planta: + 2. DESPACHO INDIVIDUAL (2016) |
| Other lecturers  | MARIA ESTHER GONZALEZ GONZALEZ  |

### 3.1 LEARNING OUTCOMES

- To identify the main stages of urban historical development , as well as the contribution of civil engineering to the historical development of cities.
- To recognize the diverse forms of urban growth , the elements of the urban fabric and the different landmarks in urban landscape.
- To apply the necessary knowledge and methods to carry out detailed urban analysis and diagnosis which serve as a basis for developing urban plans and urban facilities' projects .
- To apply the instruments and techniques of comprehensive , partial or sectorial town planning.
- To define and design planning and development solutions for existing needs , on diverse levels, from small public spaces to the neighbourhood, district or municipality scale, and among diverse sectors, such as residential, industrial or public service areas, or mixed areas.
- To apply the framework of urban regulation .
- To learn about urban management systems and their application to the urbanization processes .

### 4. OBJECTIVES

- To acquire the ability to analyze and evaluate of the built environment , understanding the current urban layout as the result of its historical construction, as well as to plan, design and urbanize the space at different scales: streets, squares, neighborhoods and urban complexes, etc.
- To learn how to present a typical urban plan and urbanization project carried out during the course .

### 6. COURSE ORGANIZATION

| CONTENTS |   |
|----------|---|
| 1        | SECTION 1. THE CITY: FORM AND STRUCTURE<br>1. History of the city and urbanism<br>2. Forms of urban development<br>3. Urban functional structure of the city  |
| 2        | SECTION 2. ANALYSIS AND DESIGN OF URBAN ELEMENTS<br>4. Analysis, diagnosis, planning and design of urban elements<br>5. Residential areas<br>6. Public spaces<br>7. Urban facilities<br>8. Industrial and commercial spaces       |
| 3        | SECTION 3. CONSTRUCTION OF THE CITY AND URBAN REGULATORY FRAMEWORK<br>9. The production of urban space and urban plans<br>10. Sectoral plans and urban facilities planning  |
| 4        | SECTION 4. THE URBANIZATION PROJECT<br>11. Urban paving and green infrastructure<br>12. Urban furniture<br>13. Blue infrastructure. Water distribution and Sanitation<br>14. Power grid and Street lighting<br>15. Other networks |

## 7. ASSESSMENT METHODS AND CRITERIA

| Description                          | Type         | Final Eval. | Reassessn | %             |
|--------------------------------------|--------------|-------------|-----------|---------------|
| Exam Part 1                          | Written exam | No          | Yes       | 30,00         |
| Exam Part 2                          | Written exam | No          | Yes       | 25,00         |
| Individual assignments               | Work         | No          | No        | 15,00         |
| Group project and workshop practices | Work         | No          | No        | 30,00         |
| <b>TOTAL</b>                         |              |             |           | <b>100,00</b> |

### Observations

Student's evaluation will be made through continuous evaluation of the student's attendance, engagement and performance in class, and through the assessment of exams, assignments and projects carried out during the lectures under the teachers' supervision.

A Midterm exam, involving the first part of the course, represents 30% of the final grade, requiring a minimum score of 4 out of 10. A second exam, representing 25% of final grade, will be held on official examination dates. Both exams will be recoverable at the extraordinary official special convocation.

The remaining 45% of the student's grade will be completed with the completion of individual assignments (15%) and a group project and workshop practices (30%). The group course project will consist of the urban analysis, urban plan and urbanization project of a neighborhood.

Only for duly justified reasons (e.g. health restrictions), assessment tests may be organised at a distance, with the prior authorisation of the Centre's Management.

Note: According to Royal Decree RD 1125/2003 on the European credit system and the grading system for official university degrees valid throughout Spain, the results obtained by the student in each of the subjects of the syllabus will be graded according to the following numerical scale from 0 to 10, to one decimal place, to which the corresponding qualitative grade may be added: 0.0-4.9: Fail (SS); 5.0-6.9: Pass (AP); 7.0-8.9: Good (NT); 9.0-10: Outstanding (SB).

### Observations for part-time students

Part-time students will be exempt from class attendance, and will be evaluated via written exams.

The attention and evaluation of students enrolled part-time in the Degree will be carried out in accordance with the UC Regulations for such cases.

With regard to the advanced assessment of the subject (November and/ or April), to which students with 12 ECTS or less pending to finish the degree are entitled, there will be a single exam of 100% of the subject without the need to attend the official exams.

## 8. BIBLIOGRAPHY AND TEACHING MATERIALS

### BASIC

Santamera, J. A.: Introducción al Planeamiento Urbano. Colegio de Ingenieros de Caminos, Canales y Puertos. Madrid, 2007 (711.4 160)

Herce Vallejo, M.: El soporte infraestructural de la ciudad. Edicions UPC. Barcelona, 2002. (711.7 5)

Arizmendi Barnes, L. J.: Instalaciones Urbanas. Infraestructuras y planeamiento. Editorial Bellisco. Madrid, 1991 (711.7 2 y 711.7 73)

Esteban i Noguera, J.: La ordenación urbanística: conceptos, herramientas y prácticas. Diputación de Barcelona-Electa. Barcelona, 2003 (711.1. 10)

Gehl, J.: Cities for people. Island Press. Washington – Covelo- London, 2010.

