

SUBJECT TEACHING GUIDE

G1158 - Urban Services

Degree in Civil Engineering

Academic year 2021-2022

1. IDENTIFYING DATA					
Degree	Degree in Civil Engineering			Type and Year	Optional. Year 3
Faculty	School of civil Engineering				
Discipline	Optional Subjects: Other Specialities 1 Optional Subjects: Other Specialities 2 Subject Area: Urban and Land Planning				
Course unit title and code	G1158 - Urban Services				
Number of ECTS credits allocated	6	Term	Semester based (2)		
Web					
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	MARIA ESTHER GONZALEZ GONZALEZ
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Office	E.T.S. de Ingenieros de Caminos, Canales y Puertos. Planta: + 2. DESPACHO INDIVIDUAL (2018)
Other lecturers	FRANCISCO JOSE GARCIA SANCHEZ

3.1 LEARNING OUTCOMES

- Capacity for the application of legal regulations and technical recommendations that define the professional activity in the field of urban planning discipline, with knowledge, understanding and direct application of the instruments and techniques of general, partial or sectoral urban planning as well as the basic principles of the local legislation in relation to these issues.
- Correct interpretation of the figures of urban planning and the existing hierarchy among them.
- Knowledge of urban management systems and their application to the urbanization processes and units of action.
- Use of appropriate techniques for the planning, design, project and management elements that form part of the urban development activity of open spaces.

4. OBJECTIVES

1. Introduce students to the knowledge and direct application of the main urban planning instruments and tools necessary for professional development in different fields of action .
2. Encourage teamwork and thus the necessary attitudes for intervention in multidisciplinary teams, with a view to the development of urban planning documents.
3. Provide the basic technical and legal training necessary to apply urban planning knowledge to the management of the development works.
4. To acquire an operational management of urban elements facing the execution of development works .

6. COURSE ORGANIZATION

CONTENTS	
1	SECTION I. URBAN SERVICES, INFRASTRUCTURE AND URBAN PLANNING. 1. Urban Services and Infrastructures: Basic concepts 2. Urban Planning Reference Parameters: Residential building typologies, Industrial and tertiary areas, Public Facilities 3. Urban Planning Instruments and Regulations 4. Urban Use: Building lots, Parcels, Alignments, Zoning, Density, Maximum building capacity 5. Master Plans & Local Land Use Plans: Methodology and contents
2	SECTION II.- PLANNING URBAN PUBLIC SPACES 6. Urban road/street network 7. Pedestrian and cycling networks 8. Parking design 9. Open spaces and Green areas 10. Sports facilities
3	SECTION III. URBAN DEVELOPMENT WORKS 11. Project and Implementation of Public Urban Services and Infrastructures 12. Urban pavements 13. Urban furnishing 14. Water supply 15. Drainage and sewerage 16. Electricity distribution 17. Pubic lighting

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Midterm exam	Written exam	No	Yes	40,00
Individual course assignments	Others	No	No	10,00
Major Project Report	Work	No	Yes	50,00
TOTAL				100,00

Observations

The partial exam will be held before Easter holidays, and will account for 40% of the final grade. It would include the first two sections. It will be recoverable in the official extraordinary exam.

The remaining 60% of the students' grade will be completed with individual assignments (10%) and the development of a Major Project Report (50%).

Individual assignments will be developed and collected in class. The Major Project will be carried out during the second half of the course and will be handed and evaluated before the official evaluation date.

Only for duly justified reasons (e.g. health restrictions) may the assessment tests be organised online, with the prior authorisation of the School 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

The assessment of part-time students will be as follows:

They can take the partial exam with a percentage of 60% and the remaining 40% can be obtained by developing the Major Project Report. In the event of failing any of them, they can be recovered under the same conditions in the official extraordinary exam.

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

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

Arizmendi Barnes, L. J., 1991. Instalaciones Urbanas. Infraestructuras y planeamiento. Madrid: Editorial Bellisco. (711.7 2 I; 711.7 2 II; M 711.7 73 III/1; M 711.7 73 III/2)

Alabern i Valentí, E. y Guilemany i Casademón, C., 1999. Infraestructuras urbanas. Barcelona: Romargraf (711.7 3)

Benévolo, L., 1977. Diseño de la Ciudad. Barcelona: G. Gili. (710.2. 3C)

Herce Vallejo, M., 2002. El soporte infraestructural de la ciudad. Barcelona: Edicions UPC. (711.7 2 I; 711.7 2 II; M 711.7 73 III/1; M 711.7 73 III/2)

Herce Vallejo, M. y Magrinya Torner, F., 2002. La Ingeniería en la evolución de la urbanística. Barcelona: Universidad Politécnica de Cataluña. (711.7 8)

Esteban i Noguera, J., 2009. Elementos de Ordenación Urbana. Barcelona: Universidad Politécnica de Cataluña.(711.1 15; 711.1 15a)

Esteban i Noguera, J., 2011. La ordenación urbanística: conceptos, herramientas y prácticas. Barcelona: Diputación de Barcelona-Electa. (711.4 30; 711.4 30a)

Estévez Goytre, R., 2006. Manual práctico de planeamiento urbanístico. Granada: Ed.Comares. (349.4 14; M 349.4 99)

Manchón, L. F. y Santamera, J. A. (Ed. 2000/1ª Ed. 1995). Recomendaciones para el proyecto y diseño del viario urbano. Madrid: Ministerio de Obras Públicas, Transportes y Medio Ambiente. (M 625.7 178)

Rubio Requena, P.M., 1979. Instalaciones Urbanas. Tecnología e infraestructura territorial. Madrid: Control Ambiental. (M 711.7 63)

Santamera, J.A., 2007. Introducción al planeamiento urbano. Madrid: Colegio de Ingenieros de Caminos, Canales y Puertos. (711.4 28; 711.4 28a; M 711.4 160)