Universitat d'Alacant
Universidad de Alicante

33524 - URBAN PLANNING AND THE ENVIRONMENT (2018-19)

General

Code: 33524
Lecturer responsible:
ORTUÑO PADILLA, ARMANDO

Credits ECTS:	**6**
Theoretical credits:	1,2
Practical credits:	1,2
Distance-base hours:	3,6

Departments involved

- **Dept:** CIVIL ENGINEERING
  Area: INFRAESTRUCTURE AND TRANSPORT ENGINEERING
  Theoretical credits: 1,2
  Practical credits: 1,2
  This Dept. is responsible for the course.
  This Dept. is responsible for the final mark record.

Study programmes where this course is taught

- DEGREE IN GEOGRAPHY AND TERRITORY ORGANIZATION
  Course type: OPTIONAL (Year: 4)
- DEGREE IN CIVIL ENGINEERING
  Course type: COMPULSORY (Year: 3)
- PHD IN MATERIALS, STRUCTURES AND SOIL ENGINEERING: SUSTAINABLE CONSTRUCTION
  Course type: COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN (Year: 9)

Competencies and objectives

Course context for academic year 2018-19

Contemporary society is characterized by increasingly urbanized spaces, forms and new challenges that require, first, a knowledge and understanding of the processes and forces that shape these spaces and, second, to provide students tools to intervention in them.
However, compared to the traditional sectorial or non-holistic approach of engineering, a new concept much more open and linked to other dimensions that constitute this new contemporary spatial reality is proposed.

Course content (verified by ANECA in official undergraduate and Master's degrees)

DEGREE IN GEOGRAPHY AND TERRITORY ORGANIZATION

General Competences (CG)

- **CG1 :** Capacity for analysis and synthesis.
- **CG10 :** Ethical commitment to sustainability, respect for fundamental rights, equality of men and women, democratic values, multiculturalism and peace.
- **CG2 :** Capacity for organisation and planning.
- **CG3 :** Capacity to manage information correctly, especially using ICTs.
- **CG4 :** Capacity to work alone or in groups depending on the context and situation.
- **CG5 :** Capacity for self-learning and adapting to new situations.
- **CG6 :** Capacity to put knowledge into practice.
- **CG7 :** Capacity to communicate orally and in writing clearly and appropriately to the context.

Specific Competences (CE)

- **CE10 :** Capacity to make spatial planning, service and activity location proposals from the viewpoint of sustainable development.
- **CE2 :** Capacity to understand and handle the concepts, methodology and techniques of Geography and Spatial Planning correctly.
- **CE3 :** Capacity to understand and use the concepts of other disciplines correctly, especially history, law and town planning.
- **CE4 :** Capacity to combine temporal and spatial dimensions when analysing and interpreting spatial planning.
- **CE9 :** Capacity to present and transmit knowledge related to spatial analysis in an ordered, simple and clear manner, appropriate to the context.

DEGREE IN CIVIL ENGINEERING

Specific Competences (Civil Branch)

- **CE-11 :** Capacity to apply environmental impact study and assessment methodologies.

Specific Competences (Specific Technology):>>Hydrology

- **CEH-2 :** Knowledge and understanding of the working of ecosystems and environmental factors.

Specific Competences (Specific Technology):>>Transit and Urban Services

- **CET-3 :** Understand the regulations concerning town planning management. Capacity to carry out spatial planning, urban planning and development projects.
- **CET-4 :** Understand the influence of infrastructures on spatial planning and the development of urban public areas, such as water supply and distribution, sanitation and water treatment, waste management, transport system, traffic, lighting, energy and communications.

Exclusive skill taught in this course

No data

Learning outcomes (Training objectives)

No data

Specific objectives stated by the academic staff for academic year 2018-19

- Understanding the spatial aspect of projects and civil engineering works in the city and the territory, removing its sectorial autonomy.
- Understanding the city and territory as complex elements, providing theoretical and interpretive content on spatial change processes and agents and underlying causes.
- Deploy skills in relation to the proposed development from the consideration of its constituent elements, to the participation of the same in the configuration of urban space.
- Relate the urban infrastructures and services with planning instruments.

Content and bibliography

Content for academic year 2018-19

THEORETICAL BLOCK

1. INTRODUCTION TO THE ECOSYSTEM URBAN PLANNING AND FUNCTIONS.

2. THE GROWTH OF CITIES: How do cities grow and why? How has addressed the growth of cities in history?
2.1. Agents involved in the growth of cities.
2.2. The quantitative and spatial growth.
2.3. Economic and environmental analysis of growth (ecological footprint).
2.4. The incidence of planning legislation on urban development.
2.5. Cost analysis.
2.6. The incidence of planning legislation on urban development.

3. STRUCTURE OF THE CITY.
3.1. Residential areas: center, widenings, periphery.
3.2. open spaces and green areas.
3.3. Urban facilities and services.
3.4 Tertiary (Commerce and Offices and leisure).
3.5. Streets.

4. FORM OF THE CITY.
4.1. Concept of the shape of the city.
4.2. Analysis of urban fabric and building types (case studies).
4.3. Quantitative parameters.
4.4. The perception of the urban landscape.

5. EMERGENT TERRITORIAL PHENOMENA:

5.1. Golf courses.

5.2. Shopping Centres.

5.3. Tourist urban development.

5.4. Urban regeneration: Non financial compensations.

5.5. Sharing Econonomy

5.6. TOD model

5.7. Civil engineering heritage

PRACTICE BLOCK:

The practice will focus on one of these topics:

1. Recovery of degraded areas related to infrastructure (rail edges, port, urban bridges, etc.).

2. Improved integration of infrastructure in urban areas.

3. Design of an infrastructure and integration in an urban/metropolitan area.

4. Environmental issues related to mobility, water and energy.

Assessment

Assessment procedures and criteria 2018-19

All the activities are compulsory to pass the subject. In case of theoretical exam, a minimum of 4 points out of 10 have to be achieved to pass the subject. If any activity is not developed correctly, the student must improve the work delivered or present a certificate to excuse the fault (no assistance).

If needed by any student, there will be an alternative final exam to pass the subject.

Description	Criteria	Type	Weighting system
Field work	Work delivered	ACTIVITIES OF EVALUATION DURING THE SEMESTER	10
Problem practices	Work delivered	ACTIVITIES OF EVALUATION DURING THE SEMESTER	40
Theoretical	Work delivered	ACTIVITIES OF EVALUATION DURING THE SEMESTER	10
Final Exam	Pass Final Exam	FINAL TEST	40

Official exam dates for academic year 2018-19

Exam session	Date	Time	Group - Classroom(s) allocated	Comments
(C2) Periodo ordinario para asignaturas de primer semestre	22/01/2019	09:00 - 11:00	GE/1-03M	Teoría

(C4) Pruebas extraordinarias para asignaturas de grado y máster	26/06/2019	Teoría