

Degree	Type	Year
Management of Smart and Sustainable Cities	FB	1

## Contact

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## Teaching groups languages

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

## Prerequisites

None in particular, but a basic knowledge of Excel is recommended. There will be one or two laboratory sessions dedicated to concepts and basic use of Excel functions.

## Objectives and Contextualisation

The main objective is to provide students with methodological tools and theoretical knowledge for the understanding and analysis of urbanization processes and the interactions between demography and economy in cities. The focus of the subject emphasizes the mastery of concepts and methods related to the study of demographic and economic phenomena, with an orientation of applicability to the study of concrete cases. Among other aspects, the dynamics and structure of urban populations, the sociodemographic heterogeneity of their inhabitants, the processes of spatial distribution of the population, the economic structure and the labour market, the effect of demographic changes on the demand for goods and services...

## Learning Outcomes

1. CM07 (Competence) Identify and solve urban problems in teams.
2. KM12 (Knowledge) Recognise the interaction between urban form and socio-demographic change.
3. SM11 (Skill) Use relevant sources of information for the study of urban movements and citizen practices.

## Content

General program of the academic year 2025-2026:

0. Introduction

1. Statistics
  - 1.1 Demographic sources
  - 1.2 Social and economic sources
  - 1.3 Statistical agencies
  - 1.4 Access to information
2. Basic concepts
  - 2.1 Temporal dimensions and analysis optics
  - 2.2 Calculation of basic indicators
  - 2.3 Standardization techniques
  - 2.4 Graphical representation
3. Population and society
  - 3.1 Population growth and population structure
  - 3.2 Migration and mobility
  - 3.3 Sociodemographic characteristics of the population
4. Economy
  - 4.1 Economic activity
  - 4.2 The labour market
  - 4.3 Housing and residential demand
5. Population and demand for goods and services
  - 5.1 Introduction to population projections
  - 5.2 Population and demand forecast

## Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
External visits (VEXT)	8	0.32	SM11, SM11
Laboratory practices (PAL)	14	0.56	CM07, KM12, SM11, CM07
Theoretical classes	28	1.12	CM07, KM12, SM11, CM07
Type: Supervised			
Individual or group tutorials	5	0.2	

Type: Autonomous

Exercicis and practices	33	1.32
Obligatory reading	15	0.6
Study written tests	35	1.4

The course is structured in three types of training activities: theory classes, laboratory sessions and external visits. These activities are carried out at three levels:

Guided activities: theory sessions (one two-hour session per week) and laboratory sessions (one hour per week in small groups) guided by the teacher.

Supervised activities: monitoring of laboratory sessions in person or virtually and external visits to institutions related to the production and/or analysis of demographic and socioeconomic information.

Autonomous activities: completion of the exercices, preparation of the written tests, study of the theoretical contents and lectures.

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.

Students are asked to use non-sexist language. The usage guidelines from UAB (see Ten Tips for Non-Sexist Language Use) may be helpful.

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
Exercises and reports of practical sessions (PAL)	40%	4	0.16	CM07, KM12, SM11
First written test	25%	2	0.08	KM12, SM11
Report on external activities (VEXT)	10%	4	0.16	SM11
Second written test	25%	2	0.08	CM07, KM12

This subject/module does not incorporate single assessment

The evaluation shall consist of:

- Two written tests: each test is 25% of the final grade; 50% of the final grade.
- Exercises and reports of practical sessions (PAL): 40% of the final grade
- Report of External Visits (VEXT): 10% of the final grade

External visits are compulsory and will be scheduled. However, substitute work is provided for students who can justify their inability to attend any of the visits.

All activities will be evaluated between 0 and 10 points. An activity is considered failed if its grade is less than 5 points.

The final grade of the subject will be a weighted average of all these activities, with the requirement that the weighted average of the two written tests is greater than 3 points. The subject will be considered passed with an average grade equal to or greater than 5.

The report on external activities (VEXT) and the general practice will be carried out in groups of two or three people, but the possibility of doing them individually will be assessed. The exercises or short practicals will be carried out individually. The delivery of the exercises and reports after the deadline will be qualified with a "Not presented". The unjustified absence in one of the written tests will be qualified as a "Not presented".

Review procedure: all evaluable activities will be subject to revision of their qualifications. The corresponding review date will be informed via Moodle.

Students who only carry out one of the evaluable activities throughout the course will be graded with a "Not presented".

The resit will consist of a written test. To qualify for the resit, it will be necessary to have obtained a minimum average grade of 3 either in the written tests or in the exercises and reports. Students who have passed the subject by continuous evaluation cannot take the resit to raise grade.

If any form of copying or plagiarism is detected in any of the assessment activities, the activity will be marked 0 and the right to resit will be lost. The use of artificial intelligence (AI) technologies is not permitted at any stage of this subject. Any work that includes AI-generated content will be considered dishonest and may result in a partial or total penalty for the activity, or a more severe penalty in serious cases.

The Mention of "Matrícula de Honor" may be awarded to students who obtain a qualification equal to or greater than 9. The number will not exceed 5% of those enrolled in the subject

Repeating students will not have special treatment in relation to assessment activities and the requirements to pass the subject.

In the event of a student committing any irregularity that may lead to a significant variation in the grade awarded to an assessment activity, the student will be given a zero for this activity, regardless of any disciplinary process that may take place. In the event of several irregularities in assessment activities of the same subject,

the student will be given a zero as the final grade for this subject.

## **Bibliography**

In the Virtual Campus students will have between 4-6 compulsory readings of articles on different topics of the subject.

The readings that appear in this bibliography are not compulsory, but for consultation; they are designed to complement the explanations given in the classroom and to clarify any doubts that may arise:

CAMAGNI, Roberto 2005 Economía urbana. Antoni Bosch editor. Barcelona

LIVI BACCI, Massimo. 1993. Introducción a la demografía. Ariel. Barcelona

SASSEN, Saskia. 2018. Cities in a world economy. Sage Publications.

TAPINOS, George (1988), Elementos de demografía. Espasa Calpe. Madrid.

## Software

It is necessary to bring a computer to the practical classes.

Excel

## Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

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