

## Demographic Analysis

Code: 104254  
ECTS Credits: 6

Degree	Type	Year	Semester
2503710 Geography, Environmental Management and Spatial Planning	OB	3	1

### Contact

Name: Joaquin Recaño Valverde  
Email: joaquin.recano@uab.cat

### Use of Languages

Principal working language: catalan (cat)  
Some groups entirely in English: No  
Some groups entirely in Catalan: Yes  
Some groups entirely in Spanish: Yes

### Teachers

Angels Perez Mateos

### Prerequisites

There are no prerequisites

### Objectives and Contextualisation

The subject has three basic objectives:

- Learning the advanced methods and techniques of demographic analysis: construction and interpretation of net moment and generation indicators for all demographic phenomena
- Access to theoretical explanations of the evolution of the most characteristic demographic phenomena, mortality, fertility, nuptials and migrations.
- The foundations of elaboration of a projection by components like activity of synthesis of the acquired knowledge.

### Competences

- Combine distinct techniques and methods of representation and spatial analysis in elaborating materials for transmitting results.
- Critically analyse the relationship between society and the region applying the conceptual and theoretical framework of geography.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
- Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.

## Learning Outcomes

1. Combine distinct techniques and methods of representation and spatial analysis in elaborating materials for transmitting results.
2. Describe different demographic phenomena.
3. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
4. Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
5. Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.

## Content

### PART I: ELEMENTS OF DEMOGRAPHIC ANALYSIS

#### 1. Demographic sources on the web

##### 1.1. Demographic sources: flows and stocks on the web

##### 1.2. Treatment of demographic microdata from censuses, MNPs and surveys.

#### 2. Advanced elements of demographic analysis

##### 2.1. The representation of time in Demography: the Lexis diagram.

##### 2.2. Optical analysis and reconstruction of longitudinal observations from cross-sectional data and vice versa

##### 2.3. Construction of different types of rates, probabilities and proportions depending on the type of observation.

##### 2.4. Advanced analysis of the effects of age, generation and time.

##### 2.5. Analysis by order of demographic phenomena

##### 2.6. Phenomenal survival tables.

### PART II: ANALYSIS OF DEMOGRAPHIC PHENOMENA

#### 3. Mortality.

##### 3.1. The measure of mortality: life expectancy.

##### 3.2. Analysis of mortality by age and cause of death.

##### 3.3. Analysis of sociodemographic factors of mortality

#### 4. Fertility and nuptiality

##### 4.1. Fertility measurement: synthetic period and generation indicators

##### 4.2. Fertility by order

##### 4.3. Analysis of reproduction indicators

##### 4.4. The indicators of nuptiality

##### 4.5. Explanatory theories of fertility and nuptiality

## 5. Migration

5.1. Demographic analysis of migration with stocks and flows.

5.2. Demographic indicators of migration.

5.3. Explanatory theories of migration.

6. Demographic approaches to social issues.

6.1. The labor market.

6.2. Education.

6.3. Gender differences.

7. Principles of demographic projections by components.

7.1. Representation of a demographic projection in the Lexis diagram.

7.2. Application of the knowledge acquired in a five-year projection.

## Methodology

The course is structured based on directed, supervised and autonomous activities where the student will learn to develop the contents of the subject with the face-to-face support of teachers at different levels.

- Guided activities: theoretical classes and face-to-face practices.

- Supervised activities: face-to-face monitoring of practices

- Autonomous activities: study of the theoretical contents and resolution of exercises.

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.

## Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Lectures	23.5	0.94	1, 2, 4, 3
Problems in compute lab	23.5	0.94	1, 2, 4, 3
Type: Supervised			
Individual or small groups tutoring	10	0.4	1, 2, 4, 3
Type: Autonomous			
Autonomus work on assignments	20	0.8	1, 2, 4, 3
Autonomus work on assignments	20	0.8	1, 2, 4, 3
Compulsory reading	15	0.6	1, 2, 4, 3
Compulsory reading	25	1	1, 2, 4, 3

## Assessment

Activities subject to evaluation:

- An objective test of knowledge made through two written tests. Weighting factor: 40 percent of the final mark. Each test would represent 20 percent of the final mark.
- Individual practices of the course. Weighting factor: 50 percent of the final mark.
- Evaluation of compulsory readings on demography and gender issues. Weighting factor: 10 percent of the final mark.

Evaluation criteria:

- Final mark of the subject will be the weighted average of all the activities submitted for evaluation.
- The final mark of the objective test will be the average of the two written tests.
- Students who have only completed 1/3 of the evaluable activities will be classified as "Not evaluable".
- The activities not delivered or performed on the indicated date will be classified as "Not Submitted".
- The plagiarism or copy of an exercise will have a 0. The repetition of a copy will have the consequence of suspending 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. Let's remember that a "copy" is considered a work that reproduces all or most of the work of one or more classmates. "Plagiarism" is the fact of presenting all or part of a text of an author as its own, without mentioning the sources, be on paper or in digital format. See UAB documentation on "plagiarism" at: [http://wuster.uab.es/web\\_argumenta\\_obert/unit\\_20/sot\\_2\\_01.html](http://wuster.uab.es/web_argumenta_obert/unit_20/sot_2_01.html).

Grade review criteria:

The students will be able to request the revision of the notes of the evaluable activities during the week following the publication of the results and at the times established by the teacher. The review process will be carried out in person or electronically depending on the health conditions and on-site criteria established by the UAB.

Second chance examination:

- The second chance examination of the subject will be done through a written test.
- Students who have completed 2/3 of the evaluable activities of the course and have obtained a final mark of the subject less than 5 points can be presented to the second chance examination.
- The mark of second chance examination will replace all the notes of the continuous evaluation and can not be higher than 5.

In the event that tests or exams cannot be taken onsite, they will be adapted to an online format made available through the UAB's virtual tools (original weighting will be maintained). Homework, activities and class participation will be carried out through forums, wikis and/or discussion on Teams, etc. Lecturers will ensure that students are able to access these virtual tools, or will offer them feasible alternatives.

## Assessment Activities

Title	Weighting	Hours	ECTS	Outcomes
Assessment of compulsory readings on different topics of demography and gender	10	0.5	0.02	1, 2, 5, 4, 3
Final redaction of Assignment Reports	50	10	0.4	1, 2, 5, 4, 3
Partial examens	40	2.5	0.1	1, 2, 5, 4, 3

## Bibliography

Published books. There are different introductory manuals in Spanish. Some are brief and very basic such as:

VALLIN, Jacques. (1991). *La Demografía*. Alianza Editorial. Madrid

PRESSAT, Roland. (1979). *Demografía estadística*. Ariel. Barcelona

Other much more detailed introductory manuals sorted by publication date are:

VINUESA, Julio et al. (1994). *Demografía: análisis y proyecciones*. Ed. Síntesis. Madrid

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

TAPINOS, Georges. (1990). *Elementos de demografía*. Espasa Calpe. Madrid

PRESSAT, Roland. (1983). *El análisis demográfico*. Fondo de Cultura Económica. Madrid

LEGUINA, Joaquín. (1981) (3ª edició). *Fundamentos de demografía*. Siglo XXI. Madrid

HENRY, Louis. (1976). *Demografía*. Labor. Barcelona

Other books published in Spanish on the evolution and the current demographic situation, at an international level and in Spain, sorted by date of publication, are:

NADAL, Jordi. (1984), *La población española siglos XVI-XX*, Barcelona, Ariel

PUYOL, Rafael. (1988), *La población española*, Madrid, Síntesis

VALLIN; Jacques. (1995). *La población mundial*. Alianza Editorial. Madrid.

LIVI BACCI, Massimo. (1993). *Historia mínima de la población mundial*. Ariel. Barcelona

LIVI BACCI, Massimo. (1998). *Historia de la población europea*. Crítica. Barcelona

PUYOL, Rafael. (ed.) (1997). *Dinámica de la población en España. Cambios demográficos en el último cuarto del siglo XX*. Editorial Síntesis. Madrid.

LEAL, Jesús. (Coord). (2004). *Informe sobre la situación demográfica en España. 2004*, Madrid, Fundación Fernando Abril Martorell

FERNÁNDEZ CORDÓN, Juan Antonio and LEAL, Jesús (Coord) (2006), *Análisis territorial de la demografía española, 2006*, Madrid, Fundación Fernando Abril Martorell

### BIBLIOGRAFIA COMPLEMENTÀRIA

NACIONES UNIDAS (1986): *Manual X. Técnicas indirectas de estimación demográfica*, Nueva York, Naciones Unidas.

HINDE, Andrew. (1998), *Demographic Methods*, Cornwall, arnoldo Publishers

ROGERS, Andrew and WILLEKENS, Frans .J. (Eds)(1986): *Migration and settlement. A multiregional comparative study*, Dordrecht: Reidel Publ. Co.

ROWLAND, Donald. T. (2003), *Demographic methods and concepts*, New York, Oxford University Press

SHRYOCK, Henry S. and SIEGEL, Jacob .S. (1976): *The methods and materials of Demography*, Academic Press, London.

PRESTON, Samuel H. et al. (2001), *Demography. Measuring and Modelling Population Processes*, Oxford, Blackwell Publishers

Links and additional bibliography will be provided in the classes

## **Software**

The software that will start throughout the course is integrated by different Microsoft Office applications: Excel, Word and Access. The basic training plan will be the Excel program.