

**COURSE DATA****Data Subject**

<b>Code</b>	34414
<b>Name</b>	Demographic analysis
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2023 - 2024

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1310 - Degree in Sociology	Faculty of Social Sciences	2	Second term
1924 - D.D. in Political and Public Admin. Sciences-Sociology	Faculty of Law	2	Second term
1925 - D.D. in Sociology-Political and Public Admin. Sciences	Faculty of Social Sciences	2	Second term
1931 - D.D. in Sociology-Political and Public Adminis. Sciences	Faculty of Social Sciences	3	Second term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1310 - Degree in Sociology	7 - Demographic analysis	Basic Training
1924 - D.D. in Political and Public Admin. Sciences-Sociology	3 - Year 2 optional subjects	Optional
1925 - D.D. in Sociology-Political and Public Admin. Sciences	3 - Year 2 optional subjects	Obligatory
1931 - D.D. in Sociology-Political and Public Adminis. Sciences	3 - Asignaturas obligatorias de tercer curso	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
SIMO NOGUERA, CARLES XAVIER	330 - Sociology and Social Anthropology



## SUMMARY

*Demographic Analysis* is a basic subject and takes place in the second academic year of the Sociology degree. It is included in the module of Methods and Techniques of Social Investigation. It provides students with the basic demographic knowledge. Its object of study is the analysis of most social phenomena. Demography studies population and populations defined as stable groups of individuals, and more specifically human populations and their distribution, dimensions, structures, general characteristics, dynamics and evolution. The demographic analysis shows the importance of the tools used to analyse and learn about the magnitude and aspects that constitute populations. Intensity and the pace at which these populations change are also objects of study of demographic analysis. The subject gives the students the chance to discuss current population issues.

## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

### Other requirements

Relationship with other subjects of the same degree

No enrolment restrictions have been specified.

Other types of prerequisites

Students are advised to have a basic knowledge of the key concepts of Introduction to Sociology, Methods and Techniques of Incorporation to the Degree, Sociostatistics, Applied IT to Social Investigation and Structure and Social Change. The use of spreadsheets is highly advisable.

## OUTCOMES

### 1310 - Degree in Sociology

- Students must have acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced textbooks, but also some cutting-edge knowledge in their field of study.
- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.



- Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.
- Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.
- Write reports and diagnoses on social problems.
- Work in a team with a multidisciplinary perspective.
- Respect and promote the principles of fundamental rights, gender equality, equal opportunities and non-discrimination, democratic values and sustainability.
- Manage documentary sources and statistics referring to social reality.
- Learn independently and develop initiative in the field of sociology.
- Analyse the relationships between population, resources and environment and the social conditions of sustainability.
- Develop gender perspective and integrate it into the study of social reality.
- Conduct comparative studies of the Spanish and Valencian social structure.
- Analyse empirical data on social structure, change and problems.
- Know and apply statistical techniques for the analysis of social reality.
- Know and use secondary data sources useful for sociology.
- Know the tools needed to create, implement and evaluate public policy programmes and social intervention projects.

## LEARNING OUTCOMES

Upon successful completion of the subject, students must be able to:

- Define and describe the key concepts that make up the specific terminology of demographic analysis.
- List and identify the sources of demographic information.
- Identify the data sources that provide demographic information.
- Identify the different perspectives of analysis and temporal dimensions.
- Organize the demographic information as temporal dimensions.
- Distinguish between different demographic indicators.
- Calculate the demographic indicators.
- Interpret demographic phenomena, its importance and transformation by graphing.



- Calculate tables of extinction (survival).
- Fix the effect of age structure in the calculation of indicators through technical standardization.
- Play the main contemporary debates demographic.
- Develop plausible hypotheses in understanding demographic phenomena.
- Criticizing concepts and demographic indicators.

## DESCRIPTION OF CONTENTS

### 1. INTRODUCTION TO DEMOGRAPHIC ANALYSIS: CONCEPTS AND DATA SOURCES

Definitions of demographics, population and demographic sources. Dimensions of the population. Discipline of demography and stages of reflection in demography. Natural movement and population dynamics. Events and demographic phenomena. The formula of population balance. The nature of the demographics: Stocks and flows. Cross-sectional and longitudinal information. Historical sources sources of stocks and flows. Contemporary sources: Sources of stocks (population census, Census Gazetteer and continuous), power flows (MNP), demographic surveys.

### 2. TEMPORAL REFERENCE IN DEMOGRAPHY AND PERSPECTIVES OF ANALYSIS

The three time dimensions in demographics: age, generation and time. Lexis diagram, basic instrument. The representation of flows and stocks in the Lexis diagram. Longitudinal optical analysis. The intensity and timing of the phenomena in a generation. Transverse optical analysis. The concept of fictitious generation. Optical analysis duration.

### 3. MAGNITUDE, STRUCTURE AND DYNAMICS OF POPULATIONS

From statistics to demographic indicators. The magnitude of the flows-events and population stocks. Index for stocks, proportions, relationship or reason. Notes dynamics: types of rates (first and second class) probabilities. Crude, specific rates, synthetic indices (summaries circumstantial). The two dimensions of rates: intensity and timing. Patterns of population structure by sex and age. Determinants and demographic effects of sex and age composition. Composition of the population by marital status. Population and Human Resources: activity status and educational level. Composition of the population according to the nature of its inhabitants.

### 4. THE STANDARDIZATION

Control structure effect: Standardisation or standardization. Relationship between gross and age specify rates. Direct Standardization. Indirect standardization.

**5. MARRIAGE, BIRTH, FERTILITY, MIGRATION**

Concepts of marriage, union formation, fertility, fecundity, fecundability and birth rate. Cross-sectional analysis of marriage, birth and fertility. Longitudinal analysis of marriage, birth and fertility  
Concepts for the study of migration. Characteristics of migration flows (intensity, timing, origins).

**6. MORTALITY, REPRODUCTION, GROWTH**

Concepts of mortality, causes of death, reproduction. The life table. Cross-sectional analysis of mortality, reproduction and marriage. Longitudinal analysis. The population growth.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theoretical and practical classes	60,00	100
Attendance at events and external activities	5,00	0
Development of group work	13,50	0
Development of individual work	13,50	0
Study and independent work	10,00	0
Readings supplementary material	20,00	0
Preparation of evaluation activities	10,00	0
Preparation of practical classes and problem	10,00	0
Resolution of online questionnaires	8,00	0
<b>TOTAL</b>	<b>150,00</b>	

**TEACHING METHODOLOGY**

The course has a strong methodological orientation and most of the lessons will be dedicated to the presentation of analysis and measurement techniques. However, current population issues will also be discussed. Students will be encouraged to conduct research of demographic statistics in public websites. The course requires daily attendance at classes. Without the daily attendance, students can hardly acquire the basic knowledge of demographic analysis.

Activities:

- In each class there will be a part focused on presentation by the teacher of the items on the programme in order to explain concepts, techniques, sources and empirical data that students must learn to handle.
- In the second part students will carry out an assignment (maximum duration of 30 minutes) in order to put into practice the contents learned. The instructions and evaluation of the task will be explained during the lesson and students will submit the result through Aula Virtual.





c) The student will carry out between 1 and 3 individual assignments. These will be carried out in a maximum of seven days and the duration for each of them will be a maximum of 3 hours. Assignments will be uploaded to Aula Virtual and the resolution of the exercise will be discussed in class. Aspects taken into consideration will include:

- Technical applications.
- Analytical argumentation.
- Structure, accuracy and precision of texts.

d) The student will also carry out between 1 and 3 group assignments. Groups will have a maximum of 5 members and will be the same throughout the course. Each group will have a coordinator, who will be responsible for gathering the team, preparing the materials, uploading the assignment and the coordination file/memory (explanation of duration, difficulties, degree of involvement of members, etc.) to Aula Virtual.

e) Twice a month brief texts (estimated reading time of max. 2 hours) will be debated and discussed in class in order to introduce new and relevant aspects related to demographic analysis, emergent demographic processes or polemic issues. Students must previously read these texts at home.

f) Two lectures related to the contents of the course will be organized and will take place on campus. Attendance and active participation will be encouraged.

## EVALUATION

Overall efforts throughout the course will be positively considered and will be reflected in the final grade. Other grading elements will be active participation in discussions and debates, practical activities and both exams (midterm and final).

Non-attendance at class means that the grade of the final examination will account for 100% of the final grade. However, the maximum grade for these students will be a 5 (pass).

Grading elements:

- Active participation in debates: 15%.
- Individual assignments: 15%.
- Team assignments: 15%.
- Final examination: 55%.
- Total: 100%.

Students must pass every activity.



The official exam for those students who have not attained the minimum grade may be used to improve the grade.

For those students who have been absent during 4 sessions or more, the official exam represents 100%.

## REFERENCES

### Basic

- BOSERUP, E. (1984), Población y cambio tecnológico. Ed. Crítica, Barcelona.
- CARSON, Dean; Ole Rasmussen, Rasmus; Ensign, Prescott; Huskey, Lee and Taylor, Andrew (2012), Demography at the Edge (International Population Studies), APA
- CREIGHTON, H. (2014), Europes ageing demography. International Longevity Centre: London, UK.
- DOMINGO, A. (2018), Posverdad, gobierno y población. Relatos demográficos para no dormir. DEMOGRAFÍA Y PROBLEMAS SOCIALES, 81.
- DORLING, D., & GIETEL-BASTEN, S. (2017), Why demography matters. John Wiley & Sons.
- DUDLEY L. POSTON JR., LEON F. BOUVIER (2010), Population and Society: An Introduction to Demography, Cambridge University Press
- ESCOLANO, N. R. (2016), Demografía. Universidad Miguel Hernández.
- ESPIAGO, J. (1985), Migraciones exteriores. Ed. Salvat. Temas Clave, Madrid.
- FESTY, PATRICK; JEAN-PAUL SARDON (coord.) (2008) Hommage à Gérard Calot: profession, démographe. Institut National d'Etudes Démographiques, ISBN 9782733240236
- HARPER, S. (2018), Demography: A Very Short Introduction (Vol. 565). Oxford University Press.
- HENRI, L. & TOULEMON L. (2014), Demografía. Enfoque estadístico y dinámica de las poblaciones. El Colegio de México; CEDUA.
- HILL, K., & HURTADO, A. M. (2017), Ache life history: The ecology and demography of a foraging people.
- LEGUINA, J. (1981), Fundamentos de demografía. Siglo XXI, Madrid.
- LIVI-BACCI, M. (1993), Introducción a la demografía. Ed. Ariel, Barcelona.
- LUNDQUIST, J. H., ANDERTON, D. L., & YAUKEY, D. (2014), Demography: the study of human population. Waveland Press.
- NADAL, J. (1984), Historia de la población española. Ed. Ariel, Barcelona.
- NEYER, Gerda; Andersson, Gunnar; Kulu, Hill and Bernardi Laura (2013), The Demography of Europe, Springer
- PRESSAT, R. (1983), El análisis demográfico. F.C.E., Madrid.



- SIEGEL, Jacob S. and Olshansky, S. Jay (2011), The Demography and Epidemiology of Human Health and Aging, Springer
- TAPINOS, G. (1990), Elementos de demografía. Espasa-Calpe, Madrid.
- TURRA, C. M., & FERNANDES, F. (2021), La transición demográfica: oportunidades y desafíos en la senda hacia el logro de los Objetivos de Desarrollo Sostenible en América Latina y el Caribe.

#### **Additional**

- Projecte censal de 2011 <http://www.ine.es/censos2011/censos2011.htm>
- Observatorio Laboral de la Crisis <http://www.fedea.es/observatorio/>
- United Nations (2011), International Migration in a Globalizing World: The Role of Youth. Department of Economic and Social Affairs. Population Division, Technical Paper Nº 2011/1 <http://www.un.org/esa/population/publications/technicalpapers/TP2011-1.pdf>
- United Nations (2011), World Population Prospects. The 2010 Revision. <http://esa.un.org/unpd/wpp/index.htm>