# Demographics

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***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The course aims to introduce the student to concepts and techniques useful for the descriptive analysis of the population, with regard to the population structure and dynamics. The course also tackles several problematic issues of current demographic trends. Particular emphasis is given to the effects of the population's ageing processes and to the transitional process to adulthood for young people in the Italian and European context. Understanding the effects and dynamics of migratory phenomena as related to the population's ageing process, will also receive particular attention in the course programme.

At the end of the course, students will be able to:

1. Know the fundamental problems, theories and indicators for demographic analysis (DD1 - Knowledge and understanding);

2. Correctly apply quantitative methods to data processing and to the analysis of demographic dynamics, and qualitatively interpret demographic phenomena in the light of modern theories of fertility, mortality and migration (DD2 - Applying knowledge and understanding);

3. Critically think about and independently judge the causes and effects of changes in the population's structure, discussing the theories learned in the course (DD3 - Making judgments).

4. Read and comment on analysis reports, interpreting the demographic transformations from a quantitative and qualitative point of view with appropriate specific language (DD4 - Communication).

5. Capture the long-term macro and micro effects of a changing population structure, with specific reference to the transitional process to adulthood and the population's ageing, particularly considering the Italian context (DD5 - Lifelong learning skills).

***COURSE CONTENT***

1. *Basic tools*

– Demographic sources.

– Lexis diagram.

– Measuring the growth of a population.

– Age pyramid and structure indicators.

– Rates and standardisation.

– Life-table and epidemiologic transition.

– Fertility and reproductive transition.

2. *Current transformations*

– Population ageing.

– Status of young people and transition to adult life.

– Immigration.

3. *Advanced tools*

– The study of individual life-course.

– Continuous-time Survival analysis.

– Applications in socio-demographic and economic framework.

***READING LIST***

A. De Rose - A. Rosina, *Introduzione alla demografia. Analisi e interpretazione delle dinamiche di popolazione,* Egea, 2022, ISBN: 9788823823303

***TEACHING METHOD***

The course will be taught through lectures, exercises and eventual presentations by experts.

***ASSESSMENT METHOD AND CRITERIA***

At the end of the course there will be a written exam that will include open and close ended questions and exercises. The exam will last 45 minutes.

Attending students have the opportunity to take an interim test divided into two tests and including questions and exercises similar to those of the written exam. Each test will include no more than 10 questions and will last 25 minutes.

Any changes and additions to what specified in this guide will be communicated on Blackboard at the beginning of the course.

***NOTES AND PREREQUISITES***

There are no prerequisites, but basic knowledge of algebra and probability.

Further information can be found on the lecturer's webpage at http://docenti.unicatt.it/web/searchByName.do?language=ENG, or on the Faculty notice board.