UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Demography

2021-1-E4102B066

Learning objectives

The course aims at providing the knowledge to analyse qualitative and quantitative changes in a population and at identifying the determinants of these changes. The course focuses on the demographic and projection methods both at the individual and family level. The students will acquire the skills to search and use demographic data, to analyse and show demographic topics.

The course provides students with the knowledge and the skills to evaluate demographic dynamics, population change and the effects on the socio-economic and political-cultural equilibrium.

Students will acquire the tools for a critical analysis of demographic issues and their evolutions.

Knowledge and understanding. This course allows students to acquire knowledge and understanding as follows:

- analyse qualitative and quantitative changes in a population
- definition of future demographic scenarios

Applying knowledge and understanding. At the end of the course, students will acquire the tools to:

- write demographic report
- analyse critically the demographic evolution
- evaluate demographic dynamics, population change and the effects on the socio-economic and political-cultural equilibrium

Contents

1. Introduction
2. Demographic data
3. Structure and size of a population
4. Growth rates in demography
5. Analysis of demographic events
6. Population projections

Detailed program

1. Introduction

2. Demographic data:

a. national and international

b. practice lab: main sources of demographic data

3. Structure and size of a population:

a. Population pyramid

b. Population age structure indicators (ageing index, age dependency ratio)

c. Population gender structure indicators (sex ratio, gender composition)

d. Ageing, lowest low fertility

e. Practice lab: comparison of structural indicators across countries

4. Growth rates in Demography

a. Arithmetic

b. Geometric

c. Continuous

d. Doubling time

e. Practice lab

5. Analysis of demographic events:

a. Age-specific rates and crude rates

b. Comparison between demographic rates.

c. Demographic analysis: methods, basic concepts (Lexis diagram, age last birthday, person-years lived, rates and probabilities)

d. Mortality (life table, infant mortality and general mortality)

e. Nuptiality (family formation and dissolution, households)

f. Fertility (intensity and characteristics, trends and comparison)

g. Migration (internal and international, measures and characteristics, the foreign-born population in Italy)

h. Practice lab: demographic dynamics

6. Population projections

a. Analytic (age and sex) method

b. Selection of hypotheses

c. Practice lab: population projection

Prerequisites

None.

Teaching methods

Lectures, exercises and practice labs. The lectures provide both theoretical issues and in-depth focus on current demographic dynamics. The exercises aim at showing the procedures of calculus for the main demographic indexes, rates and probabilities and at interpreting the results. The practice labs allow students to use real data to prepare a report on the demographic condition of a selected area.

During the Covid-19 emergency, a group per lesson will attend on class while the other will have on-line lesson in streaming.

Assessment methods

Written exam and an optional oral exam.

The written exam deals with exercises and theoretical questions to evaluate the student's skills in analysing and interpreting statistical data concerning the population. The oral exam focuses on both theoretical issues and the knowledge of the current population dynamics.

The report aims at verifying the student's ability to describe the demographic dynamics of a population and discuss their consequences (maximum of 3 points only for written evaluation equal to or greater than 18). The students who do not prepare the report will be evaluated only on the basis of the written exam.

The exam will take place at the end of the course. Considered the material available to students, the exam will be the same for all the students regardless if they attend or not the course.

During the Covid-19 emergency, both the written and the oral exam will take place online using WebEx. On the e-learning page of the course, students will find the instructions for taking the exam.

Textbooks and Reading Materials

Blangiardo G. C. (1997), Elementi di Demografia, Il Mulino, Bologna. (ristampa 2006).

And one book between:

Mencarini L. e Vignoli D. (2018). Genitori Cercasi. L'Italia nella trappola demografica. Egea. Università Bocconi Editore. (ebook available)

Golini A. e Rosina A. (a cura di) (2011). Il secolo degli anziani. Come cambierà l'Italia. Il Mulino Prismi. (available on darwin online)

Additional readings or documents will be provided during the course on the e-learning website

During the Covid-19 emergency, in case of difficulty in finding the text books, some alternatives will be provided.

Semester

II semester, III and IV ciclo (approximatively from the End of February to mid-June).

Teaching language

Italian.