UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Laboratory 2

2526-3-E4001N102

Learning objectives

1. Knowledge and Understanding
   Students will acquire basic theoretical and methodological knowledge to understand the role and use of ecological data in social research.
   They will learn how to identify, access, and use the main open and official data sources, as well as the logic behind the collection and construction of socio-territorial indicators.

2. Applying Knowledge and Understanding
   Students will be able to use ecological data to develop simple secondary analyses in the socio-territorial field.
   They will be capable of selecting appropriate sources, constructing indicators, and reading and interpreting the results obtained.

3. Making Judgements
   Students will develop the ability to critically assess the quality of sources, the reliability of data, and the methodological coherence of analyses.
   They will be able to make informed choices about the most suitable methods and indicators for different social research topics.

4. Communication Skills
   Students will be able to clearly and effectively present the results of their analyses using charts, maps, and concise written reports.
   They will be encouraged to collaborate during class and to share their interpretations of the results.

5. Learning Skills
   Students will develop the skills to independently deepen their understanding of ecological data analysis techniques, including through the use of official sources (ISTAT, Eurostat, etc.) and open-source digital tools.
   They will be able to apply the acquired knowledge to different contexts and research topics, even beyond

the scope of the course.

Contents

Ecological data refer to spatial units, and their analysis enables the study of the distribution of social phenomena on the
territory.

After a historical-methodological introduction, students will be familiarized with socio-territorial analysis through exercises
related to the collection, processing, reading and cartographic representation of data.

Detailed program

Particular attention is paid to: the identification of sources, especially open data, in the different spatial units at the local level,
national and international levels; to the quality and comparability of data; to the construction of socioeconomic and demographic indicators.

Prerequisites

Strongly recommended knowledge of basic Microsoft Office Excel functions. or those who have gaps in their knowledge of how to use the software, it is suggested that they watch a tutorial of their choice, such as https://www.youtube.com/watch?v=eNr0ZRjyFY8&t=168s

Teaching methods

The course consists of 16 hours, delivered 100% in person. The teaching program includes 10% of introductory-theoretical lectures and 90% of practical sessions and in-class exercises.

Assessment methods

The laboratory does not provide grades out of 30/30, but only pass/fail. Students must submit a summary paper of the exercises completed in class once the laboratory is finished, according to the schedule established by the instructor. This assessment process allows for the evaluation of the following skills: knowledge and understanding, applied knowledge and understanding, independent judgment, and the ability to learn.

Textbooks and Reading Materials

Suggested readings:

Pintaldi F. (2009), Come si analizzano i dati territoriali, Milano: FrancoAngeli.
Pintaldi F. (2003), I dati ecologici nella ricerca sociale. Usi e applicazioni, Roma: Carrocci.
Zajczyk F. (1997), Il mondo degli indicatori sociali. Una guida alla ricerca sulla qualità della vita, Roma: NIS.

Sustainable Development Goals

SUSTAINABLE CITIES AND COMMUNITIES