



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Laboratorio Gepri - Sicurezza urbana e inclusione sociale

2627-2-F8805N026

Learning objectives

The laboratory is designed to provide students with theoretical and applied skills on the analysis of urban risks and sustainability policies, according to the One Health approach, which integrates human health, animal health and ecosystem quality. At the end of the workshop, students will be able to:

1. Understand (DdD2) the main sources of environmental risk in urban ecosystems.
2. Know (DdD1) the European, national and regional regulatory framework on air quality and environmental health.
3. Interpret (DdD3) environmental, epidemiological and socio-demographic data from institutional sources.
4. Analyze (DdD2 and DdD5) the territorial distribution of risks and the exposure of vulnerable groups.
5. Critically evaluate (DdD3) mitigation and adaptation policies.
6. Apply (DdD2 and DdD5) the One Health approach to the analysis of urban case studies.
7. Draw up (DdD4) a brief analysis report and intervention proposal.

Contents

- One Health approach and urban sustainability.
- Air pollution and public health.
- Multi-level regulation and governance.
- Environmental monitoring (ARPA, ISPRA, EEA).
- Analysis of environmental and epidemiological data.
- Socio-environmental risk assessment.
- Analysis of a territorial case study.
- Drafting of a final report.

Detailed program

Part I- theoretical

1. Introduction to the main pollutant sources. In-depth study of the Air Pollutant Source.
2. Multi-level legislation (European, national, regional, urban governance)
3. The institutions Data collection and monitoring Arpa and Ispra, European Environmental Agency
4. The unsustainable risks for Public Health, socio-economic environmental and health costs
5. Environmental and epidemiological data analysis
6. Risk assessment in vulnerable individuals
7. Health Safety: Do the thresholds guarantee safety?
8. Mitigate environmental and health risk through environmental policies and trajectories

Part II - empirical - Analysis of an Italian case study

- 9) The territorial context: norms, actors, recent local history.
- 10) Socio-environmental risk analysis: who, how much and where it is most exposed.
- 11) Results: critical elements to be paid attention to and macro proposals for action.
- 12) Final postponement

Prerequisites

No one.

Teaching methods

The laboratory (24 hours) will be carried out in interactive mode, alternating lectures, analysis of case studies, use of environmental and epidemiological data, group work and guided discussions.

Assessment methods

- Active participation in activities.
- Quality of the analyses carried out during the exercises.
- Ability to critically interpret data.
- Elaboration and presentation of a final report related to the case study.

Textbooks and Reading Materials

Scientific materials (such as institutional reports) will be selected and slides summarizing the most important theoretical issues will be shared.

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | SUSTAINABLE CITIES AND COMMUNITIES | LIFE ON LAND
