



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Policies for Smart Cities

2627-2-FDS02Q038-FDS02Q03802

Aims

Knowledge and Understanding

The course provides an in-depth understanding of the smart city as a socio-technical phenomenon. Students acquire conceptual tools to understand the dynamics of governance, work, and participation that characterize digitally mediated urban contexts. The course combines a theoretical reflection on technology—understood as a resource that both enables and constrains action—with national and international case studies on smart cities, paying particular attention to the inequalities they may generate and to the role of public policies.

Applying Knowledge and Understanding

Students are required to develop a group project on a smart city topic of their choice, designing an empirical case study that applies the concepts and analytical frameworks introduced during the course. Projects involve data collection and analysis, the triangulation of multiple sources, and the development of socio-organizational and policy-oriented interpretations. The course fosters the ability to work with diverse datasets and existing materials, encouraging students to envision and assess solutions in real-world contexts.

Making Judgements

Through the analysis of complex case studies and critical reflection on the role of analysts and professionals working in smart city contexts, students are encouraged to develop well-reasoned evaluations and to propose informed solutions by weighing their potential benefits and drawbacks. Classroom discussions, feedback on project work, and comparative learning activities support the development of independent critical judgement and decision-making skills.

Communication Skills

Students present their group projects orally to peers and instructors, developing the ability to communicate ideas clearly, concisely, and effectively. Interactive lectures and case-based discussions encourage active participation, collaborative exchange, and constructive debate within group settings.

Learning Skills

The course includes self-directed learning activities such as individual readings, case study analysis, group project

development, and the use of external resources (reports, empirical materials, academic articles, and audiovisual content). The project-based assessment fosters independent learning and strengthens students' ability to integrate and critically engage with diverse sources of information.

Contents

Course Topics

The module covers the following topics:

- The key dimensions and defining features of the smart city
- Digital technologies, data, and urban infrastructures from a sociological perspective
- The actors involved in governing and implementing smart city initiatives
- Urban transformation and the organization of work
- Participation, citizenship, and public policies for smart cities
- How to study smart cities empirically: the case study method

Detailed program

Course Structure

The course is organized into three thematic blocks, each addressing a key issue related to the study of smart cities and supporting the development of the group project.

Block 1 – The Technological Question: A Sociological Perspective

This block introduces the core concepts and analytical framework of the course. It defines the smart city and conceptualizes it as a socio-technical process involving public, private, and civic actors. The block also examines the digital technologies, data practices, and urban infrastructures that underpin contemporary smart city initiatives.

Block 2 – The Organizational Question: Smart City Governance, Urban Transformation, Work, and Participation

This block focuses on the governance and leadership of smart cities, exploring the actors involved in their design, implementation, and management. It also examines the organization of work and its transformation within smart city contexts, as well as the relationship between citizen participation, urban policies, and digital forms of engagement.

Block 3 – The Methodological Question: Developing a Smart City Case Study

The final block provides the methodological foundations for the group project. Through the analysis of selected smart city case studies, students learn how to connect theoretical concepts with empirical research in complex urban settings. Particular attention is devoted to research design, case study methodology, data collection, and the logic of case-based inquiry.

Prerequisites

None

Teaching form

The module consists of a total of 23 hours of instruction. Approximately 70% of the teaching activities are delivered in person through a combination of lectures and interactive learning activities. The remaining 30% may be delivered remotely, either through synchronous online sessions and/or audiovisual materials prepared by the instructor. Face-to-face sessions combine traditional lectures with case study discussions and collective reflection, encouraging active participation and critical engagement with the course topics.

Textbook and teaching resource

Teaching materials include lecture slides, selected academic articles (available through the e-learning platform), case studies, and audiovisual resources. These materials are designed to support both classroom activities and independent study, providing students with theoretical, methodological, and empirical resources for the development of their group projects.

Semester

2nd semester

Assessment method

Assessment will be based on the submission of a written essay and an oral presentation on a smart city topic chosen independently by the students. The essay will serve as the assessment for both the Policies for Smart Cities and Smart Mobility modules. The essay must include a description of the problem under investigation, an analysis of data and/or empirical materials, their interpretation, and, where appropriate, a set of recommendations. It should address relevant indicators, the selection and processing of data or sources, the socio-organizational analysis of the case, and its policy implications. An oral presentation of the essay is also required. Assessment criteria include: the clarity and coherence of the problem definition and description; the quality, relevance, and appropriateness of the empirical materials used; the accuracy of the analysis and the robustness of the interpretations proposed; the quality of the policy considerations and the discussion of ethical and social implications; the overall quality of the written essay; the effectiveness of the oral presentation. There are no mid-term assessments. The final grade will take into account all of the above dimensions.

Office hours

The instructor is available by appointment. Appointments can be arranged via email.

Sustainable Development Goals

DECENT WORK AND ECONOMIC GROWTH | INDUSTRY, INNOVATION AND INFRASTRUCTURE | REDUCED

