



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Philosophy of Social Science

2122-2-E4001N095

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#### Learning objectives

Introducing:

- a) a minimal set of basic logical-epistemological tools;
- b) The basic notions involved in counterfactual causal analysis.

Primary aim of this class is not the acquisition of the so called "skills" but the acquisition of philosophical knowledges and methods which are fundamental to understanding issues on causation in the social sciences. Obviously all the skills involved in this task are practiced, such as critical thinking, foundational analysis, ecc.

#### Contents

Part one of the course presents the basic tools to be employed in epistemological and methodological analysis: mainly, the basic logical notions and the basic rules of inductive and deductive reasoning.

The second part applies these tools to the philosophical analysis of the counterfactual theory of causality as presented by David Lewis in his main essays on the topic.

As is well known, causal analysis is an essential part of scientific endeavor and also of the solution of practical problems in everyday life. The course seeks to clarify the more general concepts and problems that form the background of this type of analysis, then focusing on the philosophical part of the theory most widely accepted today: the counterfactual theory of causation.

## Detailed program

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Part one: what is a deductive inference; formal rules of inference; connectives (and, or, if-then, etc.); quantification and quantifiers; Inductive and abductive reasoning; order theory (sketch).

Part two: regularity vs counterfactual theory of causation; truth of a counterfactual; counterfactual dependence of sentences; causal dependence of events; causal dependence and causality; backward counterfactual and backward causation; Reversibility

## Prerequisites

None

## Teaching methods

Theoretical lessons

## Assessment methods

Written test with close and/or open ended questions . Oral test on demand for positive written test exclusively (both in English).

## Textbooks and Reading Materials

1) All powerpoints and other files available online at the end of the course.

2) Lewis, D., "Causation", The journal of Philosophy, Vol. 70, No. 17, Seventieth Annual Meeting of the American Philosophical Association Eastern Division (Oct. 11, 1973), pp. 556-567.

3) Lewis, D., "Causation as influence", *Journal of philosophy* vol. 97 (4):182-197 (2000)

Suggested readings:

<https://plato.stanford.edu/entries/causation-counterfactual/>

<https://plato.stanford.edu/entries/david-lewis/> (only 3.1, 3.2, 3.3, 5.2).

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