

Statistical Inference II

PhD in Economics, Statistics and Data Science, University of Milano-Bicocca

XXXVIII cycle

Instructor: Aldo Solari, aldo.solari@unimib.it

Course website: <https://aldosolari.github.io/SI2>

This course focuses on hypothesis testing, which includes classical significance tests and modern selective inference methods. The main emphasis is on understanding general concepts rather than emphasizing mathematical rigour.

- Pure significance tests.
- Significance tests: simple and composite null hypotheses.
- Distribution-free and randomization tests.
- Multiple testing.

Textbook:

Cox and Hinkley (1979). *Theoretical statistics*. CRC Press.

Other references:

Cox (2006) *Principles of Statistical Inference*. Cambridge University Press.

Lehmann and Romano (2005) *Testing Statistical Hypotheses*. Springer Texts in Statistics.

Schedule

Lecture 1	27/4	9.30-12.30	Aula Seminari U7-2104
Lecture 2	2/5	9.30-12.30	Aula Seminari U7-2104
Lecture 3	3/5	9.00-12.00	Aula Seminari U7-2104
Lecture 4	9/5	9.30-12.30	Aula Seminari U7-2104
Lecture 5	10/5	9.30-12.30	Aula Seminari U7-2104

Course material, etc. will be available on the above course website.