



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Survival Analysis Methods for Clinical Research

2324-1-129R001-BIO.21

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#### Title

Survival Analysis Methods for Clinical Research

#### Teacher(s)

Laura Antolini

#### Language

English

#### Short description

-Main Topics

- Review of basics in probability calculus: conditional probability, joint probability, total probability rule, product rule
- Definition of survival time variable and related time functions: incidence probability, survival probability, hazard rate
- Features of survival data: censoring, truncation, competing risks, end-point definitions
- Nonparametric estimation of time functions including competing risks

- Nonparametric tests for the comparison of time functions including competing risks
- Power and sample size calculation
- Fully parametric regression model
- Semi-parametric regression model

Assessment method: Written exam in Lab in Monza

## **CFU / Hours**

2 / 8 + 8

## **Teaching period**

- standard classes: 18 19 20 26 March, 8 April from 11 to 13, Room 2 Building Kytos Monza (Vedano al Lambro)
- elearning classes: 15 February 10-13, 21 March 2024 10-13 individual study and Quiz

## **Sustainable Development Goals**

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