

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### **SYLLABUS DEL CORSO**

# **Survival Analysis Methods for Clinical Research**

2324-1-129R001-BIO.21

#### **Titolo**

Survival Analysis Methods for Clinical Research

#### Docente(i)

Laura Antolini

#### Lingua

**English** 

#### **Breve descrizione**

- -Main Topics
  - Review of basics in probability calculus: conditional probability, joint probability, total probability rule, product rule
  - Definition of survival time variabile 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 / Ore

2/8 + 8

# Periodo di erogazione

- 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**