UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

# COURSE SYLLABUS

# Quantitative Approach to Biomedical Research

**2324-1002-01**

## Titolo

Quantitative Approach to Biomedical Research

## Docente(i)

- Maria Grazia Valsecchi
- Marika Vezzoli
- Davide Bernasconi
- Laura Antolini
- Alessandra Carobbio
- Stefania Galimberti

## Lingua

English

## Breve descrizione

**COURSE OBJECTIVES**
To introduce the fundamental principles and approaches of statistics in biomedical research.

**TOPICS**
Welcome and introduction – 2h Maria Grazia Valsecchi
Taxonomy of the studies – 2h Maria Grazia Valsecchi
Descriptive statistics – 6h Marika Vezzoli
Introduction to R – 4h Davide Bernasconi
Probability, sensitivity, specificity and ROC curve – 6h Laura Antolini
Statistical Distribution Functions – 4h Alessandra Carobbio
Inference: hypothesis testing & confidence interval – 4h Maria Grazia Valsecchi + 2h Marika Vezzoli
Variable transformation – 2h Stefania Galimberti

## CFU / Ore

4 / 32

## Periodo di erogazione

April 3rd 17.00-19.00 Maria Grazia Valsecchi - STREAMING
April 5th 17.00-19.00 Maria Grazia Valsecchi - PRE-RECORDED VIDEO
April 12th 17.00-19.00 Marika Vezzoli - STREAMING
April 14th 17.00-19.00 Marika Vezzoli - STREAMING
April 15th 9.00-11.00 Marika Vezzoli - STREAMING
April 15th 11.00-13.00 Davide Bernasconi - PRE-RECORDED VIDEO
April 19th 17.00-19.00 Laura Antolini - PRE-RECORDED VIDEO
April 21st 17.00-19.00 Davide Bernasconi - STREAMING
April 22nd 9.00-13.00 Laura Antolini - PRE-RECORDED VIDEO (9/11) + STREAMING (11.15/13)
April 26th 17.00-19.00 Alessandra Carobbio - PRE-RECORDED VIDEO
April 28th 17.00-19.00 Alessandra Carobbio - PRE-RECORDED VIDEO (17/18) + STREAMING (18/19)
April 29th 9.00-11.00 Marika Vezzoli - PRE-RECORDED VIDEO
April 29th 11.00-13.00 Maria Grazia Valsecchi - STREAMING
May 3rd 17.00-19.00 Maria Grazia Valsecchi - STREAMING (17.00-18.00) + PRE-RECORDED VIDEO (18.00-19.00)
May 5th 17.00-19.00 Stefania Galimberti - PRE-RECORDED VIDEO

**COURSE EVALUATION:** May 12th 18.00-19.00

## Sustainable Development Goals