



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Quantitative Approach to Biomedical Research

2324-1002-01

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#### **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

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