

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# SYLLABUS DEL CORSO

## Inferenza Statistica

2425-3-E3301M212

#### Learning objectives

the course aims to presente the main inductive tecniques of classic stsatistical inference, for problems of estimation and hypotheses testing.

#### Contents

#### **Detailed program**

- Point estimation
- Interval estimation
- main random variables
- sampling from the normal distribution
- Student's T and Fisher distributions
- Testing equality of two means
- Testing equaliti of two variances
- ANOVA
- General linear regression

#### References

- Materiale distribuito o segnalato durante le lezioni.
- materiale nello spazio e-learning dedicato al al corso
- M. Zenga Inferenza statistica, Giappichelli.
- Probability and Statistical Inference, Global Edition, 10th Edition Hogg, Tanis, Zimmerman ISBN cartaceo: 9781292454764

ISBN digitale: 9781292454757

• Mood, Graybill, Boes. Introduction to the theory of statistics. Mc Graw Hill

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#### **Prerequisites**

Differential calculus and linear algebra

#### **Teaching methods**

28 hours of theoretical lecture, 4cfu. 20 hours oinerogative mood and 8 hours in interactive way

#### **Assessment methods**

A written exam with practic exercises and theoretical questions, followed by a theoretic talk.

WRITTEN EXAM

- EXERCISES (answer to simple questions about applications of specific principles and tecniques);
- OPEN QUESTIONS (short theoretical essays);

ORAL TALK ABOUT DISCUSSION OF WRITTEN EXAM • COLLOQUIO DI DISCUSSIONE SULLO SCRITTO;

#### **Textbooks and Reading Materials**

References

- slides in e-learning plat
- M. Zenga Inferenza statistica, Giappichelli.
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#### Semester

first semester

### **Teaching language**

Italian

### Sustainable Development Goals

QUALITY EDUCATION