COURSE SYLLABUS

Statistical Inference

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.
- Probability and Statistical Inference, Global Edition, 10th Edition – Hogg, Tanis, Zimmerman
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Semester

first semester

Teaching language

Italian

Sustainable Development Goals

QUALITY EDUCATION