

Introductory Statistics

2024 Lectures Part 9 - Introduction to Statistics

Institute of Economic Studies
Faculty of Social Sciences
Charles University in Prague



Covered topics

- data set, sample statistics
- summarizing and visualization of data
- sample space, events
- definitions of probability, calculus rules
- counting techniques
- conditional probability, Bayes theorem, independence of events
- sampling techniques, ethics in statistics



Topics for Statistics

- random variables, discrete and continuous distribution, transformations
- random vectors and multivariate distributions, independence of random variables
- basic families of distribution
- expectation, variance, covariance, correlation, conditional expectation
- moment generating function
- stochastic inequalities
- random sample, laws of large numbers, central limit theorem
- point and interval estimation
- parameter hypotheses tests



Grading Requirements

- Home assignment 1 (W3) – 15 percent of the grade
- Home assignment 2 (W10) – 10 percent of the grade
- Exam Part 1 - Written Test – 60 percent of the grade
- Exam Part 2 - Discussion and Oral Examination – 15 percent of the grade
- Book reading and Active work

Minimum requirement is 30.5 percent of the grade from the written test (strictly more than 50% of the component)

Minimum requirement is 8 percent of the grade from the oral examination (strictly more than 50% of the component)

- A 91% – 100%
- B 81% – 90%
- C 71% – 80%
- D 61% – 70%
- E 51% – 60%
- F 0% – 50%



Exam dates

May May 20 and May 27

June June 4 and June 18 (and possibly June 25)

September September 2

