

Statistics 1 - Economics - 1st Semester 2013/2014
Detailed program (Link)

1. Probability

- 1.1 Introduction
- 1.2 Space spaces - events
- 1.3 Measure of probability . Kolmogorov axiomatic.
- 1.4 Interpretations of the concept of probability
- 1.5 Combinatorial Methods.
- 1.6 Conditional Probability. Bayes Theorem
- 1.7 Independent Events .

2 . Random variable . Distribution function

- 2.1 Random variable
- 2.2 Probability Distributions.
- 2.3 Classification of random variables
- 2.4 Functions of a random variable
- 2.5 Two-dimensional random variables

3 . Expected values and parameters

- 3.1 Expected Value of a random variable
- 3.2 Moments
- 3.3 Parameters of order
- 3.4 Moment Generating functions
- 3.5 Expected value and moments for two dimensional random variables

4 . Discrete distributions

- 4.1 The discrete uniform distribution
- 4.2 The Bernoulli and binomial distribution
- 4.3 The Poisson Distribution

5 . Continuous distributions

- 5.1 The Uniform distribution
- 5.2 The Normal Distribution
- 5.3 The Exponential, Gama and Chi-Square Distributions
- 5.5 Central Limit Theorem

6 . Sampling distributions

- 6.1 Probability and statistical inference
- 6.2 Specification
- 6.3 Statistics
- 6.4 The sampling distributions
- 6.5 The distribution of the sample mean and variance .
- 6.6 Asymptotic sampling distributions
- 6.7 Sampling distribution of the proportion in Bernoulli's population .
- 6.8 Sampling of Bernoulli's population . Case of two proportions
- 6.9 Normal Population : distribution of mean
- 6:10 Normal Population : distribution of the variance
- 6:11 Normal Population : ratio of "Student "
- 6:12 Normal populations : the difference between two means

6:13 Normal populations : relationship between two variances