

Statistics 1 - Economics – 2nd Semester 2015/2016
Detailed program (Link)

1. Probability

- 1.1 Introduction
- 1.2 Sample 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 (probability, density and distribution functions).
- 2.3 Classification of random variables
- 2.4 Functions of a random variable
- 2.5 Two-dimensional random variables (Marginal and conditional distributions)

3 . Expected values and moments

- 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 probability distributions

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

5 . Continuous probability distributions

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