



**STATISTICS I**  
**Degrees in Economics and Management**  
**1<sup>st</sup> Semester – Academic year 2019-2020**  
**MODULE DESCRIPTOR**

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**Office-Hours:** Tuesday morning (please, send me an email notifying me).

### **Module Aims**

The module Statistics I is designed to provide basic knowledge on Probability and will equip the students with the skills needed to successfully tackle many statistical problems in the fields of economics and management. Emphasis is placed on the notion of random variables as a way of describing phenomena influenced by chance as well as on the tools and techniques for interpreting the essential pattern implicit in them.

### **Syllabus Plan**

1. Probability
2. Random variables
3. Multivariate random variables
4. Expected values and other quantities
5. Expected values of functions of multivariate random variables
6. Special random variables
7. Distribution of sums of independent random variables

### **Indicative Learning Resources**

The main textbook for the module is:

Miller I. and Miller, M. (2013): John E. Freund's Mathematical Statistics with applications, 8th Edition, Pearson.

Alternative textbooks that you may wish to consult are:

Hogg, R.V. and Tanis, E.A. (2001): Probability and Statistical Inference, 6th Edition, Prentice - Hall,

Newbold, P.; Carlson, W. and Thorne, B. (2013): Statistics for Business and Economics, 8th Edition, Pearson.