STUDENTS ARE EXPECTED TO HAVE COMPLETED
Statistics I
Statistics II
Econometrics I
Econometrics II

COMPETENCES AND SKILLS THAT WILL BE ACQUIRED AND LEARNING RESULTS.
After this course, the student will know how to measure the volatility of a financial asset. Furthermore, he will know how to use the volatility to construct prediction intervals for the return of an asset taking into account whether the market has a high or low volatility in the moment when the prediction is made. For this purpose, GARCH and Stochastic Volatility models will be studied.
The student will also learn how to obtain correlations between financial assets that possibly are time-varying. Measuring these correlations are crucial for portfolio formation models. The estimation of the correlations will be carried out through the implementation of multivariate GARCH models. Furthermore, different econometric models will be implemented to test for different financial theories as, for example, testing for market efficiency or for estimating the Value at Risk of a given asset.

LEARNING ACTIVITIES AND METHODOLOGY
The course will have a presential part in the classroom where the blackboard and audiovisual tools will be used (3 ECTS). Furthermore, the computer rooms will be used for the tutorials where the students will learn how to used the software appropriate to implement alternative models to real data (3 ECTS).
ASSESSMENT SYSTEM

60% of the final mark will be assessed with a final examination. 40% of the final mark will depend on the marks of two partial exercises.
For the continuous evaluation to be considered it is necessary to obtain at least 5 points in the final exam.

% end-of-term-examination: 60
% of continuous assessment (assignments, laboratory, practicals...): 40

BASIC BIBLIOGRAPHY

- Gloria González-Rivera Forecasting for Economics and Business, Prentice Hall, 2013