

## LACTU2210

2014-2015

## Quantitative Risk Management

| 3.0 credits | 15.0 h | 2q |
|-------------|--------|----|
|             |        |    |

| Teacher(s) :                 | Hafner Christian ;   |
|------------------------------|--|
| Language :                   | Anglais  |
| Place of the course          | Louvain-la-Neuve   |
| Prerequisites :              | Basic classes in statistics (e.g. INGE1214) and quantitative finance   |
| Main themes :                | Analysis of various risks in financial and alternative markets   |
| Aims :                       | Ability to evaluate and assess quantitative risks  The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".   |
| Evaluation methods :         | Assignments (20%) and oral exam (80%)  |
| Teaching methods :           | Several practical assignments, to be solved on the computer, will be used to guideline the students throughout the class. The assignments will be evaluated.   |
| Content :                    | This class introduces the student to the methodology used in quantitative risk management. The topics cover basic concepts in risk management, risk measures, multivariate models, financial time series and measures of dependence. It will be focused on the statistical aspects and practical implementation of the discussed techniques. |
| Bibliography :               | « Quantitative Risk Management: Concepts, Techniques, and Tools » (2005) Alexander J. McNeil, Rüdiger Frey, and Paul Embrechts, Princeton Series in Finance.   |
| Cycle and year of study:     | > Master [120] in Statistics: General > Master [120] in Actuarial Science  |
| Faculty or entity in charge: | LSBA   |