

LECON2331-Economics of finance and risk management

Professor: Pierre Giot

Credits: 5 ECTS

Course overview:

Main themes: This course focuses on interest rates and credit risk modelling with a particular emphasis on yield curve theories, Monte Carlo simulations and tree-based approaches. Regarding credit risk modelling we focus on ratings models, yield-spread models and credit scoring models.

Learning Outcomes:

Gain a sound understanding of interest rates modelling (including the modelling of interest rates under uncertainty) and credit risk models.

Specific content

The table of contents is the following:

- Yield curve theories
- Monte Carlo simulations to model the uncertainty of interest rates
- Tree-based approaches to model the uncertainty of interest rates
- Credit risk models (ratings, yield-spread, credit scoring models)
- Introduction to futures and options.

Reference textbooks:

The course is mainly based on two books :

- 1) Santomero & Babel: Financial Markets, Instruments & Institutions
- 2) Johnson: Bond evaluation, selection and management. Powerpoint slides are available.

Evaluation:

Written exam.