

## THE ECONOMIC OF RISK IN INSURANCE

### TOPICS OF THE COURSE:

The course is based on modern concepts in non-life insurance. The course is thought in five modules:

1. In a first part, we present the concept of risk and risk measure and the pricing of risk.
2. Aggregation of risk and dependencies
3. Concept of capital and management of capital
4. adding time diversification to risk diversification
5. Entrepise risk management towards a holistic approach to risk management

### READING LIST:

- Practical Risk Theory for Actuaries by C.D: Daykin, T. Pentikäinen and M. Pesonen published by Chapman & Hall, second edition 1996
- Dynamic Financial Analysis, 2004, in the Encyclopaedia of Actuarial Science, vol.1 pages 505-519, edited by J. Teugels and B. Sundt published by John Wiley & Sons, with Peter Blum.
- Managing Bank Capital by Chris Matten, John Wiley, 2000
- Modelling Extremal Events for Insurance and Finance by Paul Embrechts, Claudia Klüppelberg and Thomas Mikosch, Springer, 1997
- An Illustrative Example of Pricing Risk by Michel Dacorogna and Christoph Hummel, Converium Helix, 2003
- Capital at Risk Michel Dacorogna and Christoph Hummel, Global Reinsurance, 1<sup>st</sup> of July 2005
- Risk Management by Michel Crouhy, Dan Galai and Robert Mark Mc Graw Hill, 2001