

Syllabus

[cmcd.economia@fgv.br]

Course: COMPUTATIONAL METHODS IN EMPIRICAL FINANCE I

Professor:

2015 SECOND SEMESTER

COURSE OUTLINE

The course provides an introduction empirical finance using MATLAB

PROGRAM

Third Quarter

1. Stylized Facts in Financial Data
 2. Univariate GARCH Models
 3. Multivariate GARCH Models
 4. Measures of Risk
- Special Topics - MIDAS

BIBLIOGRAPHY

- Danielsson, D. *Financial risk forecasting*, Wiley Finance (D2011)
- Huynh, H. T., Lai, V. S., Soumare, I. (2008) *Stochastic Simulation and Applications in Finance with MATLAB Programs*, Wiley Finance (HLS2008)
- Nyholm, K. (2008) *Strategic Asset Allocation in Fixed Income Markets: A Matlab based user's guide* (N2008)
- Pachamanova, D., Fabozzi, F. (2010) *Simulation and optimization in Finance: modeling with MATLAB, @Risk, or VBA (PF2010)*
- Tsay, R. S. (2010) *Analysis of Financial Time Series*, 3rd Edition, Wiley (T2010)
- Ghysels, E. (2014) *Matlab Toolbox for Mixed Sampling Frequency Data Analysis using MIDAS Regression Models*

GRADING

Third and Fourth Quarters: 50% applied paper and 50% assignments

[OBS: Art. 46º - Aos alunos dos Cursos de Mestrado Acadêmico e Doutorado é atribuída nota em cada disciplina, variável de 0 (zero) a 10 (dez).

