

## ***EMPIRICAL FINANCE / METHODS IN FINANCE***

Academic Year: **2016/2017**

Semester: **2nd**

Instructor(s): **Geraldo Cerqueiro and José Faias**

### Course Description:

The course is divided into two modules: (i) Corporate finance, and (ii) Investments and Financial Markets. Each module consists of six three-hour lectures and six practical sessions, each with a specific topic. The course requires substantial work outside the classroom, including reading compulsory materials and working on group assignments. Students are expected to prepare in advance the materials in the reading list and to solve the exercises provided. The topics covered are quite extensive and only part of them will be addressed thoroughly in class.

Students are expected to be experienced with traditional Office software, such as Excel (including VBA), Word and Powerpoint. The course requires basic knowledge of Statistics and Finance.

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### Course Content:

- 1) Corporate finance
  - Understanding data
  - Regression analysis
  - Correlation versus causality
  - Event studies and long-run performance measurement
  
- 2) Investments and Financial Markets
  - Statistical properties of returns
  - Investment strategies and anomalies
  - Asset allocation

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### Course Objectives:

This course aims to introduce topics in empirical Corporate Finance and Investments and Financial Markets. The applied approach of this course will allow students to use real data and implement state-of-the-art models. Students will be asked to understand and critically think about the results obtained in light of the appropriate models. At the end of the course, students will be asked to develop a new conceptual idea and implement it.

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### Grading:



The final grade is the simple average of the grades obtained in the two modules. In the first, module, the grade is determined by assignments (30%) and an exam (70%). In the second module, the grade is based on assignments (XX) and a final project. Course approval requires that the grade obtained in each exam (and each module) is not lower than eight (8.00) regardless of the average grade obtained. A discretionary change in final grade will be made depending on class participation and on peer evaluation. Students are expected to attend and participate in all classes.

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Bibliography:

- Brooks, Chris (2008) Introductory Econometrics for Finance, Cambridge University Press, 2<sup>nd</sup> ed
  - Campbell, John Y., Andrew W. Lo, Mackinlay, A. Craig (1997) The Econometrics of Financial Markets, Princeton University Press, 1997
  - Angrist, J., Pischke, J.-S. (2009) Mostly Harmless Econometrics: An Empiricist's Companion, Princeton University Press.
  - Articles will be used (provided during classes)
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Biography:

Geraldo Cerqueiro is an Assistant Professor at Católica – Lisbon since 2009. His main research interests are the role of the institutional and legal environments in affecting the financing and performance of small businesses. Geraldo received a Ph.D. in Finance from Tilburg University in 2009, a Ms.C. in Economics from Pompeu Fabra University in 2003, and a B.A. ("Licenciatura") in Economics from UCP-FCEE in 2001. Geraldo was a visiting researcher at the Board of Governors of the Federal Reserve System, Bank of Sweden, MIT, and at the Bank of Portugal.

José Faias holds a PhD in Finance (FE-UNL), a MSc in Statistics and Optimization (FCT-UNL), a MBA (CATÓLICA-LISBON) and a BA ("Licenciatura") in Mathematics - Actuarial Sciences (FCT-UNL). He was a visiting fellow at Harvard University and a visiting scholar at MIT. He has previously taught at FE-UNL and worked in the insurance and investment banking industry. At Católica-Lisbon he is teaching in the undergraduate courses, MSc of Finance and Management and in the Master of Finance programs. His research interests include empirical asset pricing, statistics and econometrics: option pricing, extreme events, regime switching models, asset allocation, international financial markets, risk management, and quantitative portfolio management.

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