EMPIRICAL FINANCE / METHODS IN FINANCE

Academic Year: 2017/2018
Semester: 2

Instructor(s): Geraldo Cerqueiro and José Faias

Contact(s) and Office hours:
Geraldo Cerqueiro: geraldo.cerqueiro@ucp.pt, Office 5326
José Faias: jfaias@ucp.pt, Office 5305-A

Office hours by appointment.

Biography:

Geraldo Cerqueiro is an Associate Professor of Finance at Católica. 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 MSc 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 the Academic Director of the MSc in Finance. He has taught in the undergraduate programs, in the 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.

Course overview and 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.
Course Content:

1) Corporate finance
   - Understanding data
   - Regression analysis
   - Correlation versus causality
   - Event studies and long-run performance measurement

2) Investments and Financial Markets
   - Investment strategies and anomalies
   - Statistical properties of returns
   - Predictability
   - Volatility
   - Asset allocation
   - CAPM
   - Stylized facts
   - Introduction to behavioural finance

Required background:

Students should have basic knowledge in statistics and probability (random variables and their distributions, statistical methods, testing and inference), as well as the contents of an introductory course in finance (valuation of bonds and stocks, capital market theory, asset pricing).

Most people only acquire a deep understanding of empirical issues by actually doing empirical work. Therefore you will be assigned exercises that require dealing with data and estimating models. You can use MS Excel, but you are free to use other software, such as Matlab or Stata.

Grading:

The final grade is the simple average of the grades obtained in the two modules with each one rounded to zero decimal cases before. In the first module, the grade is determined by assignments (30%) and an exam (70%). In the second module, the grade is based on quizzes (24%), a final project (50%), and a take-home exam (26%). Course approval requires that the grade obtained in each exam (and each module) is not lower than eight (7.00) 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.

Bibliography:

• Articles will be used (provided during classes)

Extra Costs (case studies, platforms...):

No extra cost expected.

Miscellaneous information:

Groups will be formed according to the rules established by the school. We expect groups of 4 students with a few exceptions of 5 members. All members of each group need to belong to the same section. There will be a short presentation at the end and all members are required to present their work.

Code of conduct and ethics:

Católica Lisbon School of Business and Economics is a community of individuals with diverse backgrounds and interests who share certain fundamental goals. A crucial element to achieve these goals is the creation and maintenance of an atmosphere contributing to learning and personal growth for everyone in the community. The success of CATÓLICA-LISBON in attaining its goals and in maintaining its reputation of academic excellence depends on the willingness of its members, both collectively and individually, to meet their responsibilities.

Along with all the other members of our community, students are expected to follow professional standards and CATÓLICA-LISBON standards of Academic Integrity. Some details should be mentioned here: Please arrive on time for class with uninterrupted attendance for the duration of the class. Signing attendance sheet for anyone else in the class constitutes fraud and a violation of the CLSBE code of conduct. Use of computers and other electronic devices during the class is not allowed, unless expressly requested by the instructor of the course. Students who persistently act in a disruptive and disrespectful manner during the class session may be invited to leave.

Students are expected to behave at all times according to the fundamental principles of academic integrity, including honesty, trust, fairness, respect, and responsibility. In particular,

a) In **individual graded assignments** of any type, students may not collaborate with others or use any materials without explicit permission from the instructor of the course;
b) In **group assignments and reports**, all students listed as authors should have performed a substantial amount of work for that assignment;
c) It is dishonest to fabricate or falsify data in experiments, surveys, papers, reports or other circumstances; fabricate source material in a bibliography or “works cited” list; or provide false information in other documents in connection with academic efforts;
d) **Plagiarizing**, i.e. “to steal and pass off the ideas or words of another as one’s own and or to use another’s production without crediting the source” (Merrian-Webster Dictionary) is an Academic Integrity breach. It can be avoided by using proper methods of documentation and acknowledgement. Visit this guide for additional resources on how to avoid plagiarism in your written submissions [http://en.writecheck.com/plagiarism-guide](http://en.writecheck.com/plagiarism-guide)
e) In exams students must not receive or provide any unauthorized assistance. During an examination, students may use only material and items authorized by the faculty. Use of smartwatches or other communication devices is not permitted during the exam.

Academic integrity breaches will be dealt with in accordance with the school’s code of Academic Integrity: https://www.clsbe.lisboa.ucp.pt/system/files/assets/files/academicintegritycode.pdf