1. **Title of the module**

ECON8430 (EC843) Financial Econometrics

1. **School or partner institution which will be responsible for management of the module**

School of Economics

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level: 7

1. **The number of credits and the ECTS value which the module represents**

15 credits/7.5 ECTS

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Spring Term

1. **Prerequisite and co-requisite modules**

Prerequisites:

ECON8210, Econometric Methods

ECON8220, Foundations of Financial Economics

1. **The programmes of study to which the module contributes**

This is a compulsory module for the:

* MSc Quantitative Finance and Econometrics
* MSc Economics and Econometrics

and optional in:

* MSc Financial Economics

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**
   1. Comprehensively understand the role of financial markets in modern economies
   2. Critically apply financial theories (including Efficient Market Hypothesis and Behavioural Finance) and reason at the high level of generality and abstraction
   3. Learn novel advanced techniques to test different implications of financial complex theories using the real-world financial data
   4. Identify and understand the new challenging and controversial issues in the financial markets
   5. Critically analyse financial debates conducted in the media
2. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**
   1. Retrieve information from a variety of data sources using modern computing and data access resources
   2. Critically use information to support their understanding of complex and contradictory economic and/or financial issues
   3. Proficiently communicate and present sophisticated economic and/or financial ideas through short articles and formal reports
3. **A synopsis of the curriculum**

The module offers rigorous treatment of advanced methods in modern financial econometrics. Giving equal attention to theory and empirical practice it provides students with essential knowledge indispensable for financial market professionals working in analytics departments. The module starts with the overview of core concepts of time series analysis. It proceeds with specifying, estimating and testing a range of asset pricing models including Stochastic Discount Factor Based Asset Pricing, The Capital Asset Pricing Model, and Factor Pricing Regressions. Next, the module addresses the analysis of returns predictability, both in the single regression framework and in the multivariate setting. Here we also provide careful modelling of volatility effects of the market data (e.g. by using asymmetric GARCH), and market interdependence. A special attention is paid to small sample biases and identification issues.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

*Core reading*

* Campbell, John, Lo, Andrew, and Craig MacKinlay. The econometrics of financial markets. 2nd Edition. Princeton University Press, 1997.

*Recommended reading*

* Campbell, John. Financial Decisions and Markets: A Course in Asset Pricing. Princeton University Press, 2017.
* Cochrane, John. Asset Pricing. (Revised Edition). Princeton University Press, 2009.
* Duffie, Darrell. Dynamic asset pricing theory. 3rd Edition. Princeton University Press, 2001.
* Lo, Andrew. Adaptive Markets: Financial Evolution at the Speed of Thought. Princeton University Press, 2017.
* Lütkepohl, Helmut. New introduction to multiple time series analysis. Springer, 2005.

This list will be augmented by the articles from such journals as *American Economic Review*, *Econometrica*, *Journal of Applied Econometrics*, *Journal of Econometrics*, *Journal of Political Economy*, *Quarterly Journal of Economics* and *Review of Economic Studies* among others.

1. **Learning and teaching methods**

Contact Hours: 30

Private Study: 120

Total Hours 150

1. **Assessment methods**
   1. Main assessment methods

Project. (2000 words): 20%

In Course Test (60 minutes): 20%

Examination (2 hours): 60%

13.2 Reassessment methods

Reassessment Method: 100% Exam

1. ***Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *8.4* | *8.5* | *9.1* | *9.2* | *9.3* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |
| *Private Study* | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| *Lectures* | **x** | **x** | **x** | **x** |  |  |  |  |
| *Seminars* |  | **x** | **x** |  | **x** | **x** | **x** | **x** |
| **Assessment method** |  |  |  |  |  |  |  |  |
| *Project* | **x** | **x** | **x** | **x** | **x** | **x** |  |  |
| *In Course Test* | **x** | **x** |  | **x** | **x** |  | **x** | **x** |
| *Exam* | **x** | **x** |  | **x** | **x** |  | **x** | **x** |

1. **Inclusive module design**

The School recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

1. **Campus(es) or centre(s) where module will be delivered**

Canterbury

1. **Internationalisation**

The module provides an analytical toolbox widely used at the contemporary international financial markets.

**FACULTIES SUPPORT OFFICE USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of the delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
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Revised FSO Jan 2018