1. **Title of the module**

ECON8870 (EC887) Macro-econometrics

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

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**

Pre-requisite:

ECON8860 Computational Methods with Matlab

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

It will be an option module on PhD Economics and PhD Agri-environmental Economics

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**

8.1 Read intelligently macro-empirical research (with a proper understanding of the underlying methodology of inference and identification strategy), and

8. 2 Conduct empirical research suitable for publication in an economics or econometrics journal.

* 1. Become confident in learning about and understanding novel macro-econometric techniques with a view to implementing them in their own research
  2. Apply econometrics methods to times-series data
  3. Handle real data with confidence
  4. Fully understand the conditions under which particular empirical estimators are appropriate

1. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**
   1. work confidently with data
   2. think critically and analytically
   3. address problems with quantitative analysis
   4. confidently use specialised data analysis software
2. **A synopsis of the curriculum**

The objective of this module is to introduce students to advanced topics in macroeconometrics to enhance independent research. Examples of active topics of research will be provided using examples during the lectures. In order to take part in the module students must have good knowledge of basic time series econometrics and so the module builds upon standard MSc training. Students should also have a working knowledge of MATLAB (hence pre-requisite EC886). Some examples will also be provided in Ox.

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

Durbin, J., and Koopman, S.J. (2001), Time Series Analysis by State Space Methods, Oxford University Press, Oxford, UK.

Harvey, A.C. (1989), Forecasting, Structural Time Series and the Kalman Filter, Cambridge University Press, Cambridge, UK.

West, M., and Harrison, J. (1997), Bayesian Forecasting and Dynamic Models, 2nd ed., Springer-Verlag, New York.

Kim, C.J., and Nelson, C. R. (1999),  State-Space Models with Regime-Switching. Cambridge MA: MIT Press.

Shumway, R.H., and Stoffer, D.S. (2000), Time Series Analysis and Its Applications, Springer-Verlag, New York.

Cappé, O., Moulines, E., and Rydén, T. (2005). Inference in hidden markov models. Springer Series in Statistics. Springer, New York.

Fruehwirth-Schnatter, S. (2006). Finite Mixture and Markov Switching Models.Springer Series in Statistics. Springer, New York.

Hamilton, J. (1994). Time Series Analysis. Princeton University Press.

1. **Learning and teaching methods**

Total contact hours: 15

Private study hours: 135

Total study hours: 150

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

Paper Replication Report (five thousand words) (100%)

13.2 Reassessment methods

Reassessment Instrument: 100% coursework

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

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *8.4* | *8.5* | *8.6* | *9.1* | *9.2* | *9.3* | *9.4* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |
| Private Study | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** |
| Lectures | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |
| Paper replication | **X** | **X** | **X** | **X** | **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**

This module will equip students with the tools to do macro-empirical research of internationally recognised quality. The economic examples use in the module will also have an international focus and the acquired tools will enable students to analyse real-world situation including international macroeconomic interactions.

**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.**

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| --- | --- | --- | --- | --- |
| 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