1. **Title of the module**

BUSN3740 (CB374) Quantitative Methods for Finance

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

Kent Business School

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

Level 4

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

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

BUSN3670 Introduction to Data Analysis and Statistics for Business

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

BSc (Hons) Finance and Investment with a Year in Industry

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

8.1 Understand fundamental topics of mathematics.

8.2 Apply key mathematical formulae to calculate financial variables for decision-making.

8.3 Use quantitative techniques to analyse the behaviour of financial markets.

8.4 Understand the context of published academic finance literature.

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

9.1 Demonstrate numeracy and quantitative skills.

9.2 Demonstrate ability in data analysis.

9.3 Demonstrate understanding of the application of mathematical methods.

9.4 Work and study independently, and utilise resources effectively.

1. **A synopsis of the curriculum**

This module builds on knowledge gained from BUSN3670: Introduction to Data Analysis and Statistics for Business. The module is designed to provide a sound mathematical and statistical foundation for studying finance. Students will learn the key mathematical and statistical tools necessary to analyse effectively financial data.

Indicative topics include:

* Basics: algebra, linear equations
* Solving simultaneous linear equations
* Rates of change and Differentiation
* Optimization (minimisation-maximisation)
* Introduction to matrix algebra
* The classical simple and multiple linear regression model (estimation – inference)

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

Bradley, T. (2013) *Essential Mathematics for Economics and Business*. 4th edn. Chichester: Wiley.

Swift, L. and Piff, S. (2014) *Quantitative Methods for Business, Management & Finance*. Basingstoke: Palgrave Macmillan.

[Teall](http://eu.wiley.com/WileyCDA/Section/id-302479.html?query=John+Teall), J. and [Hasan](http://eu.wiley.com/WileyCDA/Section/id-302479.html?query=Iftekhar+Hasan) I. (2002) *Quantitative Methods for Finance and Investments*. London: Blackwell Publishing.

1. **Learning and teaching methods**

Total contact hours: 32

Private study hours: 118

Total study hours: 150

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

VLE Test (30%)

Examination, 2 Hour (70%)

13.2 Reassessment methods

Reassessment Instrument**:**100% examination

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* | *9.1* | *9.2* | *9.3* | *9.4* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |
| *Independent study* | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** |
| *Lectures* | **X** | **X** | **X** | **X** | **X** | **X** | **X** |  |
| *Seminars* | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** |
| *Computer workshops* | **X** | **X** | **X** | **X** | **X** | **X** | **X** |  |
| ***Total hours*** |  |  |  |  |  |  |  |  |
| **Assessment method** |  |  |  |  |  |  |  |  |
| *VLE test* | **X** | **X** | **X** |  | **X** |  | **X** | **X** |
| *Examination* | **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**

Medway

1. **Internationalisation**

Various empirical examples based on international datasets are analysed throughout the term (in the lectures and workshops). Moreover, students are trained to use on-line databases to access international datasets which can be used to analyse international markets. Finally, the material covered during the semester will help students to comprehend and evaluate published articles in international academic journals.

**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) |
|  |  |  |  |  |
|  |  |  |  |  |

Revised FSO Jan 2018