COURSE SPECIFICATION DOCUMENT

Academic School / Department: Richmond Business School

Programme: BA Business Management with Combined Studies
                                         BA Economics with Combined Studies
                                         BA Finance and Investment with Combined Studies
                                         BSc Accounting and Finance with Combined Studies

FHEQ **Level:**   5

Course Title: Advanced Computer Applications in Management

Course Code: MGT 5230

Course Leader: Sabine Spangenberg/Sohil Majmudar

Student Engagement Hours: 120 (standard 3- credit BA course)
Lectures: 30
Seminar / Tutorials: 15
Independent / Guided Learning: 75

Semester: Fall, Spring

Credits: 12 UK CATS credits
                                         6 ECTS credits
                                         3 US credits

Course Description:
This course exposes students to advanced methods of information systems and technology in the context of Business Management, Finance and Economics. The course considers concepts such as Logic, Dashboards and Graphs, and Statistical Distributions. It allows students to apply computer methods to mathematics for business, economics and various areas of financial analysis. The use of Excel provides a common thread in the topics covered throughout the course.

Prerequisites: MGT 4205

Aims and Objectives:
The course aims to familiarize the student with a wide range of advanced features available in Microsoft's Excel spreadsheet software. The objective is to enhance the student skills already gained across a suite of problems and analyses in business, finance and economics such that possibly unrelated but similar problems may be readily solved in both academic and real-world settings. Wherever possible problems and analyses will be set so as to

enhance and consolidate the advanced mathematical and statistical skill of the student as well as providing additional exposure to topics being studied in other courses.

Programme Outcomes:
BA (Hons) Business Management with Combined Studies:
A6, B4, C1, C2, D1-D5

BA (Hons) Economics with Combined Studies:
A2, A5, B3, D

BA (Hons) Finance and Investment with Combined Studies:
A4, B3, B4, C1, C2, D1, D2, D3, D5

BSc (Hons) Accounting and Finance with Combined Studies Programme Outcomes:
B2, C2, D2

A detailed list of the programme outcomes is found in the Programme Specification. This is located at the archive maintained by the Registry and located at: https://www.richmond.ac.uk/programme-and-course-specifications/

Learning Outcomes:
By the end of this course, successful students should be able to:

- Demonstrate an ability to Identify, analyse and evaluate a range of mathematical and statistical functions in excel and their applications.

- Demonstrate an ability to produce and analyse advanced charts, tables and be aware of lookups involving multiple worksheets and multidimensional tables.

- Demonstrate understanding of evaluating financial impacts, importing and exporting xml data and enhancing decision making with What-if Analysis.

- Demonstrate understanding of automating excel tasks using Macros and Visual Basic editor.

- Engage in self-directed research to problems and troubleshooting workbooks to produce innovative solutions.

Indicative Content:

- Statistics : Distributions, Tests , Simulations , Cost benefit analysis

- Mathematics/Economics : Matrices, Rank, Inverse , Determinant , System of Equations , Eigen values and Vectors

- Finance: XNPV, XIRR , MIRR , IPMT , EFFECT , FV, YIELD, INTRATE, Mortgage calculator , Leasing options

- Advanced Charts : Waterfall charts, Gauge chart , Area chart, Radar Graph , 3D Graphs, Creating Dashboards

- Advanced Topics: Index Match, IF AND OR, OFFSET SUM or Average, CHOOSE, What-if analysis, Solver

- Automation: Macros , VBA AND XML

- APPLICATIONS AND CASE STUDIES FOR EACH

Assessment:
This course conforms to the University Assessment Norms approved at Academic Board.

Teaching Methodology:
Typically each new subject is introduced with a combination of background theory followed by instruction and demonstration of problem solutions via written notes in conjunction with a projected spreadsheet. Students are then expected to replicate the example with one-to-one assistance as necessary. Students then practice via similar examples in a tutorial setting. Reading may be set in advance of future new topics. Students are encouraged to work together where appropriate and in naturally formed groups. Course notes are provided for each subject and practices are available on the Blackboard resource.

Indicative Text(s):
- **Succeeding in Business with Microsoft Excel 2013: A Problem-Solving Approach Paperback – 27 Aug 2013**
  by Debra Gross (Author), Frank Akaiwa (Author), Karleen Nordquist (Author)
- **Excel 2019 Bible Paperback – 4 Dec 2018 by**
  Michael Alexander (Author), Richard Kusleika (Author), John Walkenbach (Author)

See syllabus for complete reading list

Change Log for this CSD:

Nature of Change	Date Approved & Approval Body (School or AB)	Change Actioned by Registry Services