Module Descriptor

Title	Data Analysis For Finance		
Session	2026/27	**Status**	
Code	LNDN11139	**SCQF Level**	11
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Business and Creative Industries**		
Module Co-ordinator	A Abubakar		

Summary of Module

This module provides students with the statistical, econometric, and computing skills required to analyse and interpret financial data. It is designed to build a solid foundation in quantitative methods used in modern finance research and practice, preparing students to conduct empirical analyses and support evidence-based financial decision-making.

The module covers key topics such as descriptive statistics, statistical inference, and tests of association, followed by econometric techniques including simple and multiple regression analysis, hypothesis testing, and model evaluation. It also introduces time-series data analysis, including forecasting and volatility modelling.

Through hands-on experience with appropriate statistical and econometric software such as Eviews, R, Excel, etc., students will learn how to apply quantitative methods to real-world financial problems. By the end of the module, students will be equipped to conduct econometric analysis, interpret empirical results critically, and gain the analytical skills necessary to enhance their master's research project and professional roles in finance.

Module Delivery Method	**On-Campus**[1] ☒	**Hybrid**[2] ☐	**Online**[3] ☐	**Work -Based Learning**[4] ☐
Campuses for Module Delivery	☐ Ayr ☐ Dumfries	☐ Lanarkshire ☒ London ☐ Paisley	☐ Online / Distance Learning ☐ Other (specify)	

[1] Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

[2] The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

[3] Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

[4] Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

Terms for Module Delivery	Term 1	☒	Term 2	☒	Term 3	☒
Long-thin Delivery over more than one Term	Term 1 – Term 2	☐	Term 2 – Term 3	☐	Term 3 – Term 1	☐

Learning Outcomes	
L1	Critically evaluate the role of statistical and econometric methods in analysing and interpreting financial data for research and decision-making.
L2	Apply appropriate quantitative technique to investigate real-world financial issues.
L3	Analyse and interpret time-series financial data using econometric models to identify trends, forecast outcomes, and assess volatility.
L4	Use statistical and econometric software to manage datasets, carry out empirical analyses, and present results effectively.
L5	Interpret and communicate empirical findings with critical insight.

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	**During completion of this module, there will be an opportunity to achieve core skills in:**
Knowledge and Understanding (K and U)	**SCQF 11** Students will gain a solid understanding of key statistical and econometric concepts and methods, and their application in analysing and interpreting financial data.
Practice: Applied Knowledge and Understanding	**SCQF 11** Students will apply statistical and econometric techniques, using financial datasets and software tools, to analyse financial problems, interpret results, and support data-driven financial decision-making.
Generic Cognitive skills	**SCQF 11** Students will develop analytical and critical thinking skills by evaluating financial data, interpreting results, and drawing evidence-based conclusions to inform strategic financial decisions.
Communication, ICT and Numeracy Skills	**SCQF 11** Students will enhance their ability to interpret and communicate findings effectively, and to use statistical and econometric software tools for analysing financial data.
Autonomy, Accountability and Working with Others	**SCQF 11** Students will develop independent problem-solving and decision-making skills, take responsibility for their analyses, and collaborate effectively in group tasks to tackle financial data challenges.

Prerequisites	**Module Code**	**Module Title**
	Other	
Co-requisites	**Module Code**	**Module Title**

Learning and Teaching

In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.

Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture / Core Content Delivery	15
Tutorial / Synchronous Support Activity	21
Independent Study	164
Please select	
Please select	
Please select	
TOTAL	200

Indicative Resources

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Dimitrios Asteriou & Stephen G. Hall (2021). Applied Econometrics (4th Ed.). Red Globe Press.

Abdulkader Aljandali & Motasam Tatahi (2018). Economic and Financial Modelling with EViews: A Guide for Students and Professionals. Springer

John Fry (2022). Quantitative Methods in Finance using R. Open University Press.

Chris Brooks (2019). Introductory Econometrics for Finance (4th Ed.). Cambridge University Press.

Studenmund A H (2017). A Practical Guide to Using Econometrics - Global Edition (7th Ed.). Pearson

Details of further resources, including textbooks, journals and online resources will be identified at the beginning of each delivery in the module handbook and made available via VLE.

(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements

In line with the Student Attendance and Engagement Procedure, Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.

For the purposes of this module, academic engagement equates to the following:

Attending all timetabled classes (online and on campus), engaging with the VLE, engaging with takeaway assignments/ case studies, and completing all the module assessments.

Equality and Diversity
The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code. In line with current legislation (Equality Act, 2010) and the UWS Equality, Diversity, and Human Rights Code, our modules are accessible and inclusive, with reasonable adjustment for different needs where appropriate. Necessary adjustment can be made to serve the specific needs of students with special learning needs when brought to the attention of the school. For instance, the lesson materials could be provided in advance if needed.
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	**Accounting Finance Law**
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☐ **Yes** ☒ **No** **If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.**
School Assessment Board	Accounting Finance and Law
Moderator	A Egbulonu
External Examiner	J Carrahar
Accreditation Details	NA
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	1.0

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Class test
Assessment 2
Analytical project
Assessment 3
(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1

Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Class test	☒	☒	☐	☐	☒	50	

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Analytical project	☐	☒	☒	☒	☒	50	

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☐	☐	☐	☐	☐		
Combined total for all components						100%	hours

Change Control

What	When	Who