

## Liverpool John Moores University

Title: Research and Quantitative Methods for Finance  
Status: Definitive  
Code: **7000LBSIF** (128053)  
Version Start Date: 01-08-2021

Owning School/Faculty: Business and Management  
Teaching School/Faculty: Business and Management

Team	Leader
Nobert Osemeke	Y

**Academic Level:** FHEQ7  
**Credit Value:** 20  
**Total Delivered Hours:** 36  
**Total Learning Hours:** 200  
**Private Study:** 164

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	11
Workshop	22

**Grading Basis:** 50 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Proposal	Research proposal	20	
Exam	Exam	Closed Book Exam	80	3

### Aims

*This module aims to equip students with the necessary skills to critically evaluate and undertake empirical research within the financial and economic sciences. Students will formulate a practical understanding of the required quantitative methods in the financial and economic sciences with an application of the fundamentals of financial econometrics to real world data. Students will also engage in content that builds their understanding of research methods in finance and economics enabling them to formulate a coherent critique of the academic landscape*

*thus generating a salient and achievable research hypothesis.*

## **Learning Outcomes**

After completing the module the student should be able to:

- 1 Interpret and critically evaluate extant research within the economic and financial sciences.
- 2 Write suitable reports on statistical and financial information through the formulation of coherent research hypotheses.
- 3 Critically analyse and construct fundamental financial and economic models for analysis.
- 4 Implement and critically review quantitative methodologies in finance and economics.

## **Learning Outcomes of Assessments**

The assessment item list is assessed via the learning outcomes listed:

Research Proposal	1	2
Closed Book Exam	3	4

## **Outline Syllabus**

*Statistics – descriptive statistics, probability distributions, hypothesis testing.*

*Regression – Ordinary least squares regressions, dummy variable regressions, regression diagnostics.*

*Financial econometrics – quantitative financial models, cross-sectional models, time-series models.*

*Research methods – formulating the research question, systematic literature review, research methodologies.*

*Relevant research tools/software.*

## **Learning Activities**

The module will be delivered by a combined weekly one hour lecture and two hour workshop. The workshops will involve the use of Gretl, Excel and Bloomberg to undertake the required analysis within the specified exercises.

## **Notes**

This module will give students the necessary skills to undertake robust empirical research.