

AFCX6018

Quantitative and Economic Analysis

Term 1, Online-flexible 2025

Department of Applied Finance

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General Information

Unit convenor and teaching staff

Geoff Brianton

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Credit points

10

Prerequisites

Admission to GradCertFin (OUA)

Corequisites

Co-badged status

Unit description

This unit provides the important building blocks in microeconomic and quantitative analysis required for advanced study in applied finance. Microeconomic analysis develops tools in demand and supply and critically applies these to the consumer and the firm. It concludes with an analysis of market structure. The second part of the unit develops quantitative skills that are used in finance, including descriptive statistics, probability, statistical inference, correlation and regression analysis. Spreadsheets are extensively used in statistical modelling.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: Apply mathematical skills to finance based problems.

ULO2: Explain and analyse the key concepts, models and theories used in microeconomics as required for applied finance.

ULO3: Apply the key concepts, models and theories used in microeconomics to solve a range of finance based problems.

ULO4: Demonstrate proficiency in using spreadsheet based statistical modelling to solve a range of finance based problems.

ULO5: Analyse data using the key concepts, models and theories used in probability and statistics.

General Assessment Information

Late Assessment Submission Penalty (written assessments)

Unless a Special Consideration request has been submitted and approved, a 5% penalty (of the total possible mark) will be applied each day a written assessment is not submitted, up until the 7th day (including weekends). After the 7th day, a grade of '0' will be awarded even if the assessment is submitted. Submission time for all written assessments is set at 11.55pm. A 1-hour grace period is provided to students who experience a technical concern.

For any late submissions of time-sensitive tasks, such as scheduled tests/exams, performance assessments/presentations, and/or scheduled practical assessments/labs, students need to apply for Special Consideration.

Please refer to the iLearn assessment guide for more details

Assessment Tasks

Name	Weighting	Hurdle	Due
Assessed Coursework	60%	No	refer to assessment guide
Final Exam	30%	No	refer to assessment guide
Online Participation	10%	No	refer to assessment guide

Assessed Coursework

Assessment Type 1: Case study/analysis Indicative Time on Task 2: 40 hours

Due: refer to assessment guide

Weighting: 60%

You will be required to participate in a variety of assessment tasks for Economic Analysis and Quantitative Analysis. These will include written activities, online quizzes and project based learning.

On successful completion you will be able to:

- Apply mathematical skills to finance based problems.
- Explain and analyse the key concepts, models and theories used in microeconomics as required for applied finance.
- · Apply the key concepts, models and theories used in microeconomics to solve a range of

finance based problems.

- Demonstrate proficiency in using spreadsheet based statistical modelling to solve a range of finance based problems.
- Analyse data using the key concepts, models and theories used in probability and statistics.

Final Fxam

Assessment Type 1: Examination Indicative Time on Task 2: 22 hours Due: refer to assessment guide

Weighting: 30%

2-hour online exam via iLearn on all Topics

On successful completion you will be able to:

- Apply mathematical skills to finance based problems.
- Explain and analyse the key concepts, models and theories used in microeconomics as required for applied finance.
- Apply the key concepts, models and theories used in microeconomics to solve a range of finance based problems.
- Demonstrate proficiency in using spreadsheet based statistical modelling to solve a range of finance based problems.
- Analyse data using the key concepts, models and theories used in probability and statistics.

Online Participation

Assessment Type 1: Participatory task Indicative Time on Task 2: 10 hours

Due: refer to assessment guide

Weighting: 10%

Participation in online discussion forums. Online discussions and tasks will be conducted during the term. You are required to participate actively in these forums, and your contributions will be assessed.

On successful completion you will be able to:

- Apply mathematical skills to finance based problems.
- Explain and analyse the key concepts, models and theories used in microeconomics as required for applied finance.
- Apply the key concepts, models and theories used in microeconomics to solve a range of finance based problems.
- Demonstrate proficiency in using spreadsheet based statistical modelling to solve a range of finance based problems.
- Analyse data using the key concepts, models and theories used in probability and statistics.

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

Delivery and Resources

refer to iLearn page

Unit Schedule

Week	Topic	Assessment	Weight	Topic Start
0	Essential Pre work	Participation forum (Language and Eco)		Monday 06 January 2025
1	Descriptive statistics	Participation forum (Misuse of Statistics)*		Monday 13 January 2025
2	Statistical Distribution	Quiz	10%	Monday 20 January 2025
3	Inference	Assignment	10%	Monday 27 January 2025
4	Regression	Quiz	10%	Monday 03 February 2025
5	Machine Learning /AI ⁺	Participation forum (Statistics in Action)*		Monday 10 February 2025
6	Key Concepts	Participation forum (Economics in Action)*		Monday 17 February 2025
7	Market analysis & Elasticity	Final Assignment released		Monday 24 February 2025
8	Cost Curves & Competitive Market	Participation forum (Perfect Competition)*		Monday 03 March 2025
9	Market Structures	Final Assignment (Eco & Quant)	30%	Monday 10 March 2025
10	Swot Vac	(none)		

¹ If you need help with your assignment, please contact:

² Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

12	Final Assessment	30%	
	Participation	10%	

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- · Fitness to Practice Procedure
- · Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit <u>Student Policies</u> (<u>https://students.mq.edu.au/support/study/policies</u>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.e du.au) and use the search tool.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

Results

Results published on platform other than <u>eStudent</u>, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in <u>eStudent</u>. For more information visit <u>connect.mq.edu.au</u> or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe <u>academic integrity</u> – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free <u>online writing and</u> d maths support, academic skills development and <u>wellbeing consultations</u>.

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- · Chat with a WriteWISE peer writing leader
- Access StudyWISE
- Upload an assignment to Studiosity
- Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- · Subject and Research Guides
- Ask a Librarian

Student Services and Support

Macquarie University offers a range of **Student Support Services** including:

- IT Support
- · Accessibility and disability support with study
- Mental health support
- <u>Safety support</u> to respond to bullying, harassment, sexual harassment and sexual assault
- Social support including information about finances, tenancy and legal issues
- Student Advocacy provides independent advice on MQ policies, procedures, and processes

Student Enquiries

Got a question? Ask us via the Service Connect Portal, or contact Service Connect.

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/ offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.

Unit guide AFCX6018 Quantitative and Economic Analysis

Unit information based on version 2025.02 of the Handbook