



AFCX6018

Quantitative and Economic Analysis

Term 3, Online-flexible 2024

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

AFCP6018

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.

Assessment Tasks

| Name | Weighting | Hurdle | Due |
|--------------------------------------|-----------|--------|------------------------|
| Online Participation | 10% | No | Refer to Unit Schedule |
| Final Exam | 30% | No | Refer to Unit Schedule |
| Assessed Coursework | 60% | No | Refer to Unit Schedule |

Online Participation

Assessment Type ¹: Participatory task

Indicative Time on Task ²: 10 hours

Due: **Refer to Unit Schedule**

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.

Final Exam

Assessment Type ¹: Examination

Indicative Time on Task ²: 22 hours

Due: **Refer to Unit Schedule**

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.

Assessed Coursework

Assessment Type ¹: Case study/analysis

Indicative Time on Task ²: 40 hours

Due: **Refer to Unit Schedule**

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.

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

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

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

Delivery and Resources

Refer to Unit Schedule

Unit Schedule

| AFCP6018/AFCPX6018 Term 3 - 2024 - Quantitative and Economic Analysis | | | | | |
|---|----------------------------------|---|--------|-----------------------|-------------------------------------|
| Week | Topic | Assessment | Weight | Topic Start | Assessment Due |
| 0 | Essential Pre work | Participation forum (Language and Eco) | | Monday 24 June 2024 | 11:55 PM Monday 08 July 2024 |
| 1 | Descriptive statistics | Participation forum (Misuse of Statistics)* | | Monday 01 July 2024 | 11:55 PM Monday 15 July 2024 |
| 2 | Statistical Distribution | Quiz | 10% | Monday 08 July 2024 | 11:55 PM Monday 22 July 2024 |
| 3 | Inference | Assignment | 10% | Monday 15 July 2024 | 11:55 PM Monday 29 July 2024 |
| 4 | Regression | Quiz | 10% | Monday 22 July 2024 | 11:55 PM Monday 12 August 2024 |
| 5 | Machine Learning /AI* | Participation forum (Statistics in Action)* | | Monday 29 July 2024 | 11:55 PM Monday 05 August 2024 |
| 6 | Key Concepts | Participation forum (Economics in Action)* | | Monday 05 August 2024 | 11:55 PM Monday 12 August 2024 |
| 7 | Market analysis & Elasticity | Final Assignment released | | Monday 12 August 2024 | 11:55 PM Monday 19 August 2024 |
| 8 | Cost Curves & Competitive Market | Participation forum (Perfect Competition)* | | Monday 19 August 2024 | 11:55 PM Monday 26 August 2024 |
| 9 | Market Structures | Final Assignment (Eco & Quant) | 30% | Monday 26 August 2024 | 11:55 PM Monday 02 September 2024 |
| 10 | Swot Vac | (none) | | | |
| 12 | | Final Assessment | 30% | | 01:00 PM Saturday 07 September 2024 |
| | | Participation | 10% | | |

| | | | |
|--|-------|------|--|
| | Total | 100% | |
|--|-------|------|--|

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://policies.mq.edu.au\)](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 [Student Policies \(https://students.mq.edu.au/support/study/policies\)](https://students.mq.edu.au/support/study/policies). 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 \(https://policies.mq.edu.au\)](https://policies.mq.edu.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 [eStudent](#), (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 [eStudent](#). For more information visit connect.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe [academic integrity](#) – 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 [online writing and maths support](#), [academic skills development](#) and [wellbeing consultations](#).

Student Support

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

dents.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](#)
- [Safety support](#) 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 [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.

Unit information based on version 2024.03 of the [Handbook](#)