

# **AFCP6018**

# **Quantitative and Economic Analysis**

AFC term 1, Fully online/virtual 2021

Department of Applied Finance

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#### Disclaimer

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#### Notice

As part of Phase 3 of our return to campus plan, most units will now run tutorials, seminars and other small group activities on campus, and most will keep an online version available to those students unable to return or those who choose to continue their studies online.

To check the availability of face-to-face activities for your unit, please go to <u>timetable viewer</u>. To check detailed information on unit assessments visit your unit's iLearn space or consult your unit convenor.

### **General Information**

Unit convenor and teaching staff

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Contact via Email

Credit points

10

Prerequisites

Admission to GradCertFin or GradDipAppFin or MAppFin or MAppFin(Adv)

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 <a href="https://www.mq.edu.au/study/calendar-of-dates">https://www.mq.edu.au/study/calendar-of-dates</a>

# **Learning Outcomes**

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

**ULO1:** Apply mathematical skills to finance based problems.

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

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

**ULO4:** Analyse data using the key concepts, models and theories used in probability and statistics.

**ULO5:** Demonstrate proficiency in using spreadsheet based statistical modelling to solve a range of finance based problems.

### **General Assessment Information**

#### <u>Information - Extension Requests / Penalties</u>

#### Online Participation (15%)

No extensions will be granted. Students who have not submitted the task prior to the due date will be awarded a mark of zero for the task, except for cases in which an application for Special Consideration is made and approved.

Further information on submitting an Application for Special Consideration can be found at <a href="http://students.mq.edu.au/study/my-study-program/special-consideration">http</a> s://students.mq.edu.au/study/my-study-program/special-consideration.

#### Assessed Coursework (55%)

No extensions will be granted. Students who have not submitted the task prior to the due date will be awarded a mark of zero for the task, except for cases in which an application for Special Consideration is made and approved.

Further information on submitting an Application for Special Consideration can be found at <a href="https://students.mq.edu.au/study/my-study-program/special-consideration">https://students.mq.edu.au/study/my-study-program/special-consideration</a>.

#### Final Exam (30%)

Deferral of an examination is not permitted unless an application for Special Consideration is made and approved.

Students who do not attend receive a mark of zero. This penalty does not apply in cases where an application for Special Consideration has been made and approved.

Further information on submitting an Application for Special Consideration can be found at <a href="http://students.mg.edu.au/study/my-study-program/special-consideration">http://students.mg.edu.au/study/my-study-program/special-consideration</a>.

### **Assessment Tasks**

Name	Weighting	Hurdle	Due
Online Participation	15%	No	Refer to iLearn
Assessed Coursework	55%	No	Refer to iLearn
Final Exam	30%	No	Exam Week

## **Online Participation**

Assessment Type 1: Participatory task

Indicative Time on Task 2: 30.00 hours

Due: Refer to iLearn

Weighting: 15%

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

### Assessed Coursework

Assessment Type 1: Case study/analysis Indicative Time on Task 2: 40.00 hours

Due: Refer to iLearn

Weighting: 55%

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

### Final Exam

Assessment Type 1: Examination Indicative Time on Task 2: 12.00 hours

Due: **Exam Week** Weighting: **30**%

Online Exam via iLearn on all Topics

On successful completion you will be able to:

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

- 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**

#### REQUIRED AND RECOMMENDED TEXTS AND/OR MATERIALS

#### **Required Text:**

The required textbooks for this unit are:

Microeconomics: Principles and Practice, 2nd edition (2017) by Frost, Taylor,
 Weerapana, Schuwalow, Cengage Learning. This textbook is available as either a print book - (ISBN-10: 0170380096 ISBN-13: 9780170380096) or eBook. See links below:

https://www.coop.com.au/search?keyW=9780170380096

Details on the eBook (a VitalSource eText) can be found at: <a href="https://www.vitalsource.com/en-au/p">https://www.vitalsource.com/en-au/p</a>

<sup>&</sup>lt;sup>1</sup> If you need help with your assignment, please contact:

<sup>&</sup>lt;sup>2</sup> Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

#### roducts/microeconomics-principles-and-practice-lionel-frost-john-taylor-v9780170278973

It is recommended that students purchase the text with the Coursemate option.

Basic Business Statistics, 5th edition (2018) by Berenson, Levine, Szabat, O'Brien,
Watson and Jayne, Pearson Australia (ISBN 9781488617249). Details on the textbook
can be found at <a href="https://pearson.com.au/9781488617249">https://pearson.com.au/9781488617249</a>. The textbook is available from
the publisher's website as a paperback or as a VitalSource eText. The textbook is also
available as a paperback from the Co-op Bookshop.

#### **Additional Readings:**

- · Additional readings are included iniLearn.
- Students should assume these readings are examinable unless otherwise advised.

#### **Assumed Knowledge:** Mathematical content

This unit has a high level of numerical content. Consequently, this unit is mathematical
and arithmetical. The applied nature of this unit means that the focus is on application of
knowledge rather than complex mathematical derivations. To help prepare students for
the numerical content in this unit, students will find a Fundamental Maths Quiz in iLearn.
This will allow students to test their existing mathematics knowledge. Details on the quiz
can be found iniLearn.

**Assumed Access:** Access to a computer with word processing and spreadsheet capability is assumed, as is general student computer literacy. In particular, students need access to a version of Microsoft Excel which includes regression analysis.

#### TECHNOLOGY USED AND REQUIRED

This is an online unit which will make use of the University's iLearn system.

#### Unit's iLearn Site:

- Found by logging on to iLearn <u>ilearn.mq.edu.au</u>, then clicking on *AFCP6018* Quantitative and Economic Analysis.
- This is where you will find forums, downloadable resources and links to important pages.
- The forum allows you to communicate with other students and lecturer(s) and may provide supplementarymaterial.
- You are requested to post your questions on the forums at least 24 hours prior to the
  assessment submission date or the examination date. Questions posted after that time
  may not be answered. Please ensure that you do not leave your questions to the
  last few days.

#### **Important Notice:**

- It is important that you familiarise yourself with the unit's iLearnsite.
- All students should check iLearn regularly and look for updates and distribution of materials related to the unit or assessments and participate in forum discussions.

### **Unit Schedule**

The following schedule is a guide to the timing of each topic. Details of the required readings are provided in iLearn.

Week	Topic	Date when you should have started working on this topic
0	Topic 0: Essential pre-work	Monday, 4 January 2021
1	Key concepts, supply & demand model	Monday, 11 January 2021
2	Topic 2: Market analysis & elasticity	Monday, 18 January 2021
3	Topic 3: Cost curves & the competitive market	Monday, 25 January 2021
4	Topic 4: Market structures	Monday, 1 February 2021
5	Complete Economic assessment tasks	Monday, 8 February 2021
5	Topic 5: Descriptive statistics	Monday, 15 February 2021
6	Topic 6: Probability & random variables	Monday, 22 February 2021
	Topic 7: Statistical estimation & inference	Monday, 1 March 2021
9	Topic 8: Correlation, regression & indices	Monday, 8 March 2021
11	Complete quantitative assessment tasks  Exam preparation start	Monday, 15 March 2021
12	Online exam period	Saturday, 27 March – Sunday 28 March 2021

### **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
- Grade Appeal Policy
- Complaint Management 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). 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.mg.edu.au/admin/other-resources/student-conduct

#### Results

Results published on platform other than <a href="mailto:eStudent">eStudent</a>, (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 <a href="mailto:eStudent">eStudent</a>. For more information visit <a href="mailto:ask.mq.edu.au">ask.mq.edu.au</a> or if you are a Global MBA student contact <a href="mailto:globalmba.support@mq.edu.au">globalmba.support@mq.edu.au</a>

### Student Support

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

### **Learning Skills**

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to help you improve your marks and take control of your study.

- Getting help with your assignment
- Workshops
- StudyWise
- 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

Students with a disability are encouraged to contact the <u>Disability Service</u> who can provide appropriate help with any issues that arise during their studies.

## Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

### IT Help

For help with University computer systems and technology, visit <a href="http://www.mq.edu.au/about\_us/">http://www.mq.edu.au/about\_us/</a> 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.